

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



LSHTM Research Online

Takian, Amirhossein; (2009) Implementing family medicine in Iran identification of facilitators and obstacles. PhD thesis, London School of Hygiene & Tropical Medicine. DOI: <https://doi.org/10.17037/PUBS.00878723>

Downloaded from: <https://researchonline.lshtm.ac.uk/id/eprint/878723/>

DOI: <https://doi.org/10.17037/PUBS.00878723>

Usage Guidelines:

Please refer to usage guidelines at <https://researchonline.lshtm.ac.uk/policies.html> or alternatively contact researchonline@lshtm.ac.uk.

Available under license. To note, 3rd party material is not necessarily covered under this license: <http://creativecommons.org/licenses/by-nc-nd/3.0/>

<https://researchonline.lshtm.ac.uk>

**IMPLEMENTING FAMILY MEDICINE IN IRAN:
IDENTIFICATION OF FACILITATORS AND OBSTACLES**

AMIRHOSSEIN TAKIAN

Thesis submitted to the University of London
For the Degree of Doctor of Philosophy (PhD)

Health Services Research Unit

Department of Public Health and Policy

London School of Hygiene and Tropical Medicine



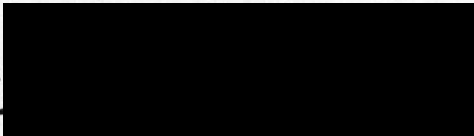
September 2009

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

Statement of Own Work

Declaration by Candidate

I have read and understood the School's definition of plagiarism and cheating given in the Research Degrees Handbook. I declare that this thesis is my own work, and that I have acknowledged all results and quotations from the published or unpublished work of other people.

Signed:....  Date: 18th September 2009

Full name:.. Amirhossein Takian

Abstract

Background. Most countries that have based their healthcare systems on primary care enjoy better population health, lower health disparities, more equitable access to care, and lower costs. Iranian primary health care (PHC) has achieved population health indices similar to that of the best in the region during the past two decades. Despite this, the system showed itself to be both inadequate in meeting the evolving health needs of the population and unaffordable by many. To address these shortages, in 2005 it was decided to implement a new system, called family medicine (FM), together with Behbar (rural insurance for all) in rural areas and in urban areas of less than 20,000 population. The aim of this thesis was to identify facilitators of and barriers to the implementation of FM in Iran.

Methods. Qualitative methods were used, particularly individual semi-structured interviews with stakeholders at three levels: national (19 interviews), provincial (9), and local (43). In addition, three focus groups, document analysis, and observations in health centres were used. The framework approach was employed as the main method for analysis, while remaining open to accommodate emerging themes. The analysis was based on a modified fourfold framework consist of administration, bargaining, interpretation and institutional structuring components, originally introduced by Harrison (2004).

Results. The study revealed four interdependent factors that influenced implementation: aspects of the policy; the existing environment; the experience of implementation; and attitudes and perceptions of local practitioners and the public. Making the policy in the 'organized anarchies' of the health system, where ambiguity is prevalent, few people involved and imposing it on others was at the heart of problems with implementation. The policy that was conceptually welcomed because of its innovation and incentive for cooperation, was badly put into practice. The core barrier was the merger of two diverse policies, implemented concurrently by two hostile organizations (MOH & MIO).

Conclusions. The thesis revealed the dynamic model of health policy analysis. The policy was essentially adopted on the basis of idealistic views rather than a real solution to existing problems. Implementation was an attempt by two organizations with different aims. Despite some efforts to reduce practical difficulties, the underlying divergence between Behbar and FM was too fundamental to be overcome. Parliament's attempt to separate the purchaser from the provider resulted in great mistrust between the two and to some extent undermined the essence of FM.

TABLE OF CONTENTS

ABSTRACT.....3

TABLE OF CONTENTS.....4

LIST OF FIGURES.....8

LIST OF TABLES.....9

CURRENCY EQUIVALENTS.....10

ABBREVIATIONS.....10

ACKNOWLEDGEMENTS.....12

CHAPTER 1: INTRODUCTION.....14

1 Why conduct this study?.....14

2 Health system in Iran.....15

3 Primary care in other contexts.....20

4 Purpose of the thesis.....23

5 Outline of the thesis..... 23

CHAPTER 2: LIERATURE REVIEW: THEORIES OF POLICY IMPLEMENTATION.....26

Introduction.....26

1 Historical background & review strategy.....26

2 Methodology of the review.....27

3 Implementation.....28

4 Theories of policy implementation.....29

4.1 Top-down approaches (implementation as separate from policy).....30

4.2 Bottom-up approaches (implementation as a part of policy).....33

4.3 Towards a pragmatic understanding of implementation: Synthesizing theories36

5 Discussion.....43

6 Conclusion: Selection of a theoretical model for studying implementation.....45

CHAPTER 3: LITERATURE REVIEW: A SYSNTHESIS OF EMPIRICAL STUDIES TO IDENTIFY FACILITATORS OF AND BARRIERS TO IMPLEMENTATION.....49

Introduction.....49

1 Developing a three stage model for structured review.....49

2 Design and methods of studies..... 51

3 Facillitators.....52

4 Obstacles.....	56
5 Discussion.....	65
6 Conclusions.....	68
 CHAPTER 4: A DESCRIPTION OF FAMILY MEDICINE IN IRAN.....	 71
<i>Introduction.....</i>	71
1 History of primary health (PHC) care in Iran.....	71
2 Preparation for the reform.....	73
2.1 Principles of implementing FM.....	73
2.2 Aims of FM.....	74
3 Development of FM.....	75
4 Principles of concurrent implementation.....	77
5 Preliminary outcomes of implementation.....	85
 CHAPTER 5: METHODOLOGY.....	 90
<i>Introduction.....</i>	90
1 Justification of a qualitative approach.....	90
2 Researcher's assumptions and position.....	93
3 Study design.....	95
4 Sampling.....	104
5 Data analysis.....	107
6 Ethical considerations.....	111
7 Organization of the results.....	111
 CHAPTER 6: ASPECTS OF THE POLICY.....	 114
<i>Introduction.....</i>	114
1 Aspects that promoted acceptance of the policy.....	115
2 Criticisms of the policy.....	129
3 Summary.....	143
 CHAPTER 7: THE EXISTING ENVIRONMENT.....	 147
<i>Introduction.....</i>	147

1 The existing PHC network.....	147
2 The insurance system.....	150
3 Organizational capacity of the health system.....	152
4 Individuals' knowledge & insight.....	158
5 Legal ground for implementation.....	160
6 Political environment.....	161
7 Rural setting specifications.....	164
8 Availability of resources.....	166
9 Summary.....	175
 CHAPTER 8: EXPERIENCE OF IMPLEMENTATION.....	 178
<i>Introduction.....</i>	178
1 Administrating implementation.....	178
2 Cooperation.....	189
3 Political management of implementation.....	205
4 Communication.....	214
5 Explanation of the reform to staff & the public.....	220
6 Auditing performance.....	226
7 Summary.....	231
 CHAPTER 9: IMPACT OF THE POLICY ON LOCAL STAKEHOLDERS.....	 235
<i>Introduction.....</i>	235
1 Impact on public sector practitioners.....	235
2 Impact on private practitioners.....	246
3 Impact on the public.....	249
4 Summary.....	254
 CHAPTER 10: DISCUSSION & CONCLUSION.....	 257
<i>Introduction.....</i>	257
1 Summary of findings.....	257
2 Theoretical explanation of findings.....	259
2.1 The content.....	260
2.2 The context.....	266

2.2.1 Health care governance: ‘Garbage can’ model of choice.....	266
2.2.2 Effective policy brokering.....	267
2.2.3 Knowledge and insight of policy makers.....	269
2.3 The process.....	270
2.3.1 Ineffective policy execution.....	270
2.3.2 The process: Local antagonism.....	280
2.4 Conclusion.....	283
3 Applicability of selected theories in a middle-income country.....	285
3.1 Multiple Streams and network theories.....	286
3.2 “Garbage can” model.....	287
3.3 Advocacy coalition framework.....	288
3.4 Institutional Rational Choice (IRC).....	290
3.5 Principal-agent perspective.....	291
4 Contributions to the theoretical literature.....	292
5 Rigour of the study.....	294
5.1 limitations of the thesis.....	295
5.2 Validity & reliability	296
5.3 Generalisability	297
6 Policy implications and future research.....	298
7 Epilogue.....	303
LIST OF REFERENCES.....	304
APPENDIX I. LIST OF INTERVIEWEES AND FOCUS GROUPS PARTICIPANTS AT THREE LEVELS.....	325
APPENDIX II. INTERVIEW GUIDES FOR THREE LEVELS.....	328
APPENDIX III. SUMMARY OF EMERGED THEMES AND SUB-THEMES.....	334
APPENDIX IV. THE INFORMATION SHEET.....	337
APPENDIX V. FINAL LIST OF INCLUDED LITERATURE IN CHAPTER 2.....	339
APPENDIX VI. SUMMARY OF CHARACTERISTICS AND FINDINGS OF INCLUDED STUDIES IN CHAPTER 3.....	340
APPENDIX VII. BLAXTER’S CRITERIA FOR THE EVALUATION OF INCLUDED ARTICLES IN CHPTER 3.....	349

LIST OF FIGURES

Figure 1.1 The map of Iran, its neighbours and internal divisions.....17

Figure 1.2 Organizational structure of local health system in Iran..... 19

Figure 2.1 The four-fold framework and the link of each frame to explain findings.....48

Figure 5.1 Dynamic framework for health policy analysis: a roadmap of the results
chapters.....112

Figure 7.1 Health centre in village X168

Figure 7.2 Visit room in Health centre X.....169

LIST OF TABLES

Table 2.1 Main aspects of top-down and bottom-up approaches to policy
implementation.....36

Table 3.1 Facilitators of implementation.....57

Table 3.2 Obstacles to implementation.....65

Table 4.1 Changes in practitioners' number before and 18 month after
implementation in selected provinces in Iran..... 86

Table 4.2 Diagnosis and maintenance of four target diseases before and after
implementation of FM..... 89

Table 4.3 Comparison of some health indices before and after implementation
of FM.....89

CURRENCY EQUIVALENTS:

Currency Unit: Iranian Rial
OR

1 Tooman (TM) = 10 Iranian Rials

UK £1.00 \cong 1650 Tooman
US \$1.00 \cong 995 Tooman
(As in September 2009)

ABBREVIATIONS:

ACF	Advocacy Coalition Framework
A & E	Acute care & Emergency
AIDS	Acquired Immune Deficiency Syndrome
AMSO	Army Medical Services Organization
AUB	Abnormal Uterine Bleeding
Behbar	Rural Insurance For All
BKKBN	Indonesian National Family Planning Coordination Board
BMA	British Medical Association
BTC	Behvarz Training Centre
CFDC	Centre for Management of Diseases
COH	Commission on Health
CPR	Cardio Pulmonary Resuscitation
CSO	Civil Society Organization
DA	District Authority
DM	Diabetes Mellitus
DOC	Deputy of Coordination
DOH	Department of Health
EBM	Evidence-based Medicine
ECG	Electrocardiography
FD	Family Doctor
FM	Family Medicine
GDOH	Golestan Department of Health
GDP	Gross Domestic Product
GM	General Medicine
GMA	Golestan Medical Association
GMC	General Medical Council
GMIO	Golestan Medical Insurance Organization
GMU	Golestan Medical University
GNP	Gross National Product
GP	General Physician
GPA	General Practitioners Association
HBP	High Blood Pressure
HERIMP	Higher Educational and Research Institute in Management and Planning
HH	Health House
HIV	Human Immunodeficiency Virus
HP	Health Post
ICSP	Issues in Current Service Provision

ID	Identification Document
IKRF	Imam Khomeini Relief Foundation
IMA	Iranian Medical Association
IMR	Infant Mortality Rate
INS	Iranian National Census
IRC	Institutional Rational Choice
I.R.I	Islamic Republic of Iran
I.R.I.B	Islamic Republic of Iran Broadcasting
IT	Information technology
LSHTM	London School of Hygiene & Tropical Medicine
MIO	Medical Insurance Organization
MMR	Maternal Mortality Rate
MOH	Ministry of Health
MOHME	Ministry of Health and Medical Education
MP	Member of the Parliament
MPO	Management & Planning Organization
MWSS	Ministry of Welfare and Social Security
N/A	Non Applicable
NBHT	New Born Hypothyroidism
NGO	Non-governmental Organization
NHA	National Health Account
NHS	National Health Services
NOFM	National Office for Family Medicine
NUHSR	National Unit for Health Services Reform
PCP	Primary Care Physician
PEHP	PHC Expansion & Health Promotion
PHC	Primary Health Care
PhD	Doctor of Philosophy
PIU	Programme Implementation Unit
PM	Prime Minister
PMO	Planning & Management Organization
PR	Provider
PRB	Population Reference Bureau
PU	Purchaser
REP	Representative
SP	Specialized Polyclinic
SQKM	Square Kilometre
SSO	Social Security Organization
TB	Tuberculosis
TM	Tooman
UK	United Kingdom of Great Britain & Northern Ireland
UNDP	United Nations Development Programme
US	United States
USA	United States of America
USD	United States Dollars
VS	Versus
WHO	World Health Organization
WHV	Woman Health Volunteer

Acknowledgements

It is incredible to look back on what at times seemed like a lonely journey, only to realise that I was supported each step of the way by family, friends and colleagues, old and new.

This thesis would not have been possible without the endless patience and support of a large number of people. First, I am particularly grateful and indebted to my supervisor Prof Nick Black (LSHTM) for his support and advice throughout the study. His comprehensive mentorship balanced my numerous shortages and made my scattered ideas more solid and applicable. I am grateful to my first supervisor and advisor Dr. Arash Rashidian (LSHTM & TUMS) for his support and advice on the study design, data collection, and useful comments on different Chapters. I particularly thank you Arash because of trusting me in a critical time and letting me to consolidate my future direction. I would also like to thank my advisors Prof Nick Mays and Dr. Cicely Marston (LSHTM). In particular, Nick because of his invaluable input on analysis and interpretation of the data. A huge thank-you to Mr. M. Kabir (MOH & GMU) in Iran for his honest friendship and facilitation, without which most of the field study would have been impossible. I am also grateful to Dr. M. Vaezmahdavi (MOH & MWSS) in Iran for his advice, and very helpful facilitation.

This study was a unique opportunity for me to experience more about characteristics of Iranian people and specifications of my beloved country. I sincerely thank all those who submitted themselves to my questions and interrogations and provided me with the materials to do the analysis, many of whom cannot be named to observe their confidentiality. Special thanks to Dr. S. Semnani, Dr. M. Zanganeh, Dr. N. Heravi, Dr. M. Shabihi, Dr. M. Aarabi (GMU), authorities and people in Agh Ghala, Bandar Turkmen, Ali Abade Katool, Minoodasht, Azad Shahr, and Kalaleh health districts in the Golestan province, who hosted and trusted me, and shared their experiences with me, hoping for improvement of health services in Iran. I would also like to thank Mrs. M. Mardfard, Mrs. E. Jamshidbeigi and Dr. K. Shadpour in the MOH for their useful information and materials.

Finally, I am hugely indebted to my beloved wife Sara for her invaluable emotional and intellectual support throughout this PhD. She also read all the Chapters and provided me with incredible feedback. I cannot thank her enough. This PhD became one of the most memorable experiences in my life because our beautiful son AmirAli was born during this period. I particularly thank Sara for her remarkable patience and love throughout the time I spent on this thesis and not with her when she needed my utmost support.

"There is nothing more difficult to manage, more dubious to accomplish, no more doubtful of success...than to initiate a new order of things. The reformer has enemies in all those who profit from the order and only lukewarm defenders in all those who would profit from the new order". Machiaveli (Quoted in Wilsford, 1995)

Dedicated to:

"All those whose life is devoted to improving the wellbeing of mankind"

Chapter 1: Introduction

1 Why conduct this study?

The need to enhance primary care is clear because of the important part it plays within health care systems (Starfield,1998). Countries whose healthcare delivery focuses on the role of specialists tend to fare less well (Davis et al,2006) in surveys that take account of the three WHO (the World Health Organization) defined aims of healthcare systems: the improvement of health, fair financing, and responding people's expectations (WHO,2000). Primary care potentially offers crucial advantages within health systems in terms of health status of the public, costs, and improving health related outcomes (Campbell,2007). This is why, the WHO highly recognizes the value of a strong primary care base within national health systems (WHO,2004).

The Iranian pattern of PHC (Primary Health Care) has achieved population health indices similar to that of the best in the region during the past years (UNDP,2003; WHO,2008), but there is still need to do more. A foreign observer describes the health system in Iran:

'Iran is a large country with a well developed health care system, both public and private. It has sufficient doctors to meet its needs. It has a well developed primary health care network which offers care right down to the village level for all people in the country, and a well-functioning referral system' (Couper,2004).

Despite the extensive network in rural areas, the main features of the Iranian health care system were an emphasis on private inpatient care and hospital based services rather than primary care or preventative medicine, input based planning, rather than needs or cost effectiveness based planning, and a reliance on funding from the state budget or out of pocket rather than through social insurance or taxation. In the last decade, this model had shown itself to be inadequate to meet the evolving health needs of the population, as well as unaffordable. The main criticism in Couper's report is training in family medicine, presumably lack of family medicine as a result:

'...one notable lack is that there is no general practice or family medicine within universities in Iran' (obid).

To combat this, implementing family medicine (an adopted model of primary care with GPs as gate-keepers), was at the heart of recent health sector reforms (NUHSR,2005). The

implementation officially started in August 2005 concurrently with another reform called Behbar (rural insurance for all), in villages and cities of less than 20,000 population, hosted by rural health centres alongside health houses (Figure 1.2).

Developing policies and plans is a lot easier than implementing change. As Walt and Gilson (1994) emphasize:

'Recent health reforms are likely to fail because it is expected that policies will be implemented as planned without taking into consideration factors that affect implementation'.

Buse et al (2005) argue that implementation is the most important phase of policy. However, implementation is often the most neglected phase of policy making and is sometimes seen as divorced from agenda setting and policy formulation (Sabatier & Jenkins-Smith, 1993). It is useful therefore both retrospectively and prospectively, to understand past policy failures and successes and to plan for future policy implementation, as well as investigating the ongoing implementation to improve its process and outcomes (Walt et al, 2008). However, a long span of study of the policy process may well be needed to identify unintended and unexpected consequences of policy, 'a decade or more' sometimes (Sabatier, 2007). There is no simple way of knowing when the best time to initiate such work is.

In this chapter, the Iranian health system is briefly introduced in order to understand the current hierarchical structure in which decisions are made and health services are delivered. The importance of primary care as well as the position of FM is then considered. Finally, the aim and objectives of the thesis together with its structure are outlined.

2 Health system in Iran

The Islamic Republic of Iran (I.R.I) is the third biggest country in the Middle East (Figure 1.1) with almost 72 million inhabitants, 23 million of these live in rural areas. The country is divided into 30 provinces with 338 districts which consist of 69,000 villages and 887 urban points or cities (SCI, 2007). It has seven cities of more than 1 million inhabitants, with Tehran being the capital and the largest (about 12 million population). The country has a GNP per capita (PPP in international \$ in 2006) of USD 9800 (WHO, 2008).

Iran has a dual public and private health system. There are approximately 104,000 hospital beds and about 650 hospitals throughout the country, both public and private. The country has 102,000 physicians (mainly general practitioners) with about 42,000 specialists. There are 1.1 physicians and 2.6 nurses per 1000 population (Cheraghali et al,2008).

According to the Iranian constitution (Article 29) and the Islamic principles, all Iranian citizens are entitled to receive free health care at the point of use. About 85% of health care is provided by the government and 15% is private. In cities about 95% of people have social or private health insurance. Usually they pay approximately 10% of the cost of admission themselves and about 20% for outpatient services. Private hospitals, which are active in major cities, also get paid by different insurance schemes under government authority. These schemes run their own hospitals as well (Couper,2004).

The entire health system is managed by a combined Ministry of Health and Medical Education (MOHME)- to keep the abbreviation shorter and more convenient to follow, I use MOH instead of MOHME in the entire thesis, unless otherwise specified- which is structured around a number of deputy ministers responsible for particular areas such as human resources, legal affairs, education and research. It also regulates the provision of private health services as well as NGOs (the World Bank,1999). The nature of the structure means that these officials are often senior academics with a lot of practical experience and a high level of education. The medical university in each province is responsible for looking after public sector health care in the province, both in terms of providing human resource training and managing the public sector health system. Chancellors of medical universities who simultaneously hold the position of Undersecretary for Health in the province, are appointed by the Minister of Health and enjoy a reasonable power of attorney to make decisions in their province/city.

Fundamental steps to improve the health system were taken almost 40 years ago as a part of a healthcare development programme in the Western Azerbaijan province, prior to the Alma-Ata declaration in 1978. Being described as an "incredible masterpiece" (Tavassoli,2008), the Iranian primary health care (PHC) networks devised in 1981 by creating health houses in rural areas, which emphasized community participation and intersectoral cooperation, and focused on basic health care financed by governmental budget. Before the recent introduction of family medicine, the PHC provided services including: immunization, prevention and control of communicable diseases, prevention of

Figure 1.1 The map of Iran, its neighbours and internal divisions. The Golestan province, where the local study was conducted is highlighted in green.



unexpected pregnancies, oral health, mothers and children health, family planning, community nutrition improvement, environmental health, occupational health, and schools and youth health. Each health house serves 1500 people in its village and surrounding settlements. There are about 17,000 health houses around the country. As the first points of seeking services, health houses have a fundamental role in providing basic care in rural

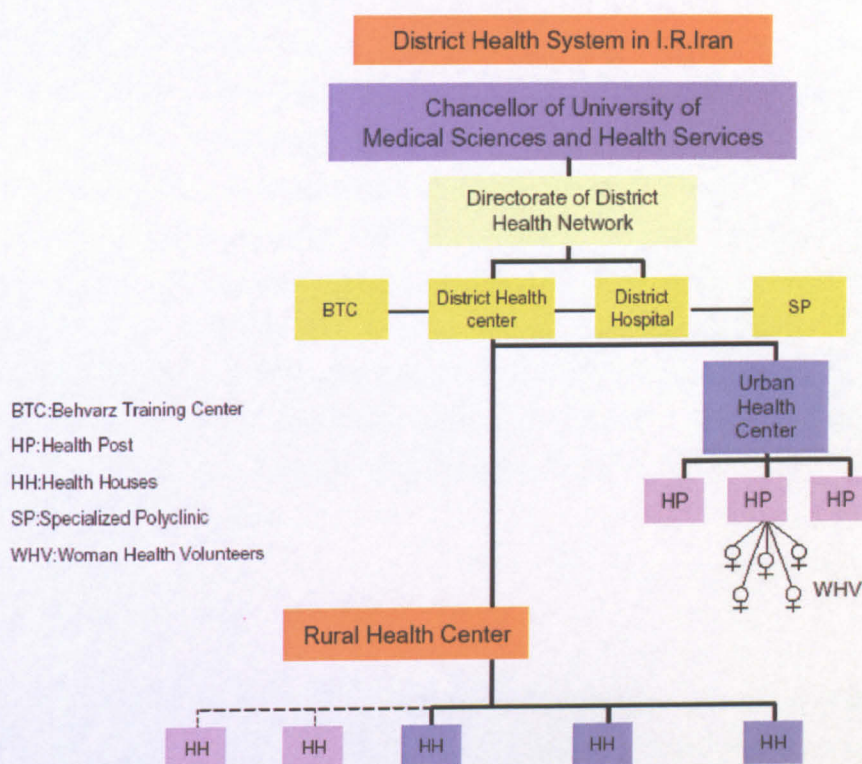
areas, where 35% of the population live (HERIMP,2004). The health house is staffed by locally sourced health workers called *behvarz* from the Farsi words *beh* (good) and *varz* (skill), a multipurpose community health worker trained for two years at a district level. There are at least one female and/or one male *behvarz* in every health house. The male *behvarz* is responsible for environmental sanitation activities and services in satellite villages (Chapter 4), while mother and child services and family planning are mainly provided by female *behvarz*. The health houses refer patients to rural health centres. The PHC reaches almost 90% of the population and is particularly extensive and integrated in rural areas (World Bank,1999;WHO,2008).

Health houses are supervised and supported by rural health centres, which cover about 6000 to 10,000 people. Each of the 2274 rural health centres has one or more general practitioners, several health technicians (mid level workers responsible for a range of different activities including occupational health and environmental health, communicable diseases, etc), midwives, and administrative personnel. The general practitioners in the health centres are also responsible for visiting the referring health houses, to supervise the *behvarz* working in these, and to see any patients that they are having difficulty with. Many rural health centres also have delivery facilities attached to them.

The corresponding structures in urban areas are health posts which are similar to health houses but cater for much larger numbers i.e. about 12,000 people per health post. The health posts are also staffed by health technicians (usually three: family health technicians, one environmental health technician and one midwife) who are trained at university level. The health post refers patients to an urban health centre which covers a population of 40-60 000 people. Again there are health technicians in these health centres, but more general practitioners per capita. There are also 2182 urban health centres in cities, responsible for residents and villagers from close rural areas. However, the PHC in cities is fragile and loose compared to the comprehensive networks in rural areas. Usually, there are a number of volunteers in health centres who facilitate communication with the population, provide training for the public, and follow up cases with special needs.

The role of both the urban and rural health centres is management of elective and emergency patients referred to them, supporting and supervising the health houses or health posts, and issues related to the public health service. The health centres in turn are under the management of a district health centre. The district health centre, an administrative structure responsible for the management of the districts, is also linked in to

Figure 1.2 Organizational structure of local health system in Iran



Source: Malekafzali, 2002

the academic system so is able to respond to educational and training issues as well as getting assistance and support from the university schools of public health. Figure 1.2 illustrates the hierarchy of the PHC network in Iran. Understanding this structure is essential for appreciating health services delivery within the FM framework.

The health centres refer patients to district hospitals. District general hospitals are staffed by at least 5 specialists in internal medicine, paediatrics, obstetrics and gynaecology, surgery and anaesthetics. General practitioners are mainly used in the emergency section and in the out-patients department. Each district has between one and five hospitals depending on its size. District hospitals in turn refer to the provincial university teaching hospitals, which can refer to the major urban hospitals for super-specialised services.

There is no consensus regarding the proportion of GDP for health in Iran. Some report 6.5 % (PRB,2004), others estimate 7.5% (Cheraghali et al,2008), while the WHO recent report

(2008) indicates that 6.9% of GDP is spent on health care. Out of this, expenditure on outpatients, drugs, and inpatient care is 15%, 15%, and 23.8% respectively, while only 7% of the budget is spent in primary care. Ignoring the share of foreign donations and private insurance bodies, neither of which are significant, finance is provided from the public budget and direct public contributions, whereas secondary and tertiary care are financed (and sometimes directly provided) through compulsory schemes of the Social Security Organization (SSO) for private sector employees, labours and their dependents; the Medical Insurance Organization (MIO) for civil servants, rural households, the self-employed, and others (e.g. students); and the Army Medical Service Organization (AMSO) for members of the military and their dependents. In addition, the Imam Khomeini Relief Foundation (IMRF), funded by the government as well as public donations, is used to insure the poor and low-income rural residents for inpatient services; this scheme was handed over to the MIO after introducing Behbar (rural insurance for all). Private insurance generally is supplementary.

3 Primary care in other contexts

Most countries that have based their healthcare systems on primary care enjoy better population health outcomes, lower health disparities, more equitable access to care, and lower costs (Starfield et al,2005;Ferrer et al,2005). Primary care or general practice has specific features in organization, patient pattern, client-doctor relationship, health team composition, and focus, which are different from other settings of health services. The function of general practitioners (referred to as family doctors in this thesis) and their way of managing different cases is also distinguishable from their specialist counterparts.

Although, primary care has a common meaning, it varies by the range of services provided or qualifications of practitioners, doctors in particular. For instance, General Practitioners (GPs) in the UK are trained in primary care prior to being qualified to work as a GP. Some GPs in the UK have special interests in particular fields like dermatology or diabetes, who spend their time partly seeing patients referred from other GPs. In the USA, doctors who practice in primary care might be internists, paediatricians, or even gynaecologists. However, family doctors in Iran have no specific training in primary care. Chapter 4, section 4.1.2 explains the definition of GPs in Iran and its variation with other settings such as UK. Apart from their qualifications, primary care doctors generally provide health services with the assistance of other professionals, called health teams in Iran (Chapter 4). Approaching primary care on the basis of family medicine and prioritizing primary services

over specialized care via gate-keeping to enhance quality and efficacy of services, reducing costs, and prioritizing prevention over treatment have been points of attention in different settings of primary care over past decades. There is some evidence that health spending in countries with such a system was less than settings with no primary care and gate-keeping in place (7.8% vs 8.6% of GNP) (Anderson et al,2000). It is expected that such programmes provide more equitable access to care, particularly for specialised and inpatient services, as well as reduce patients' unnecessary visits to specialists.

Given the different periods in various countries where family medicine is in practice as well as various patterns of programmes, there is no evidence on the effectiveness of such programmes in many contexts. Nonetheless, many countries have implemented a primary care system based on the British model of general practice, where patients enter the health system and are referred to specialised level only by a GP (general practitioner). For instance, the USA during 1990s adopted a model where the general practitioner was the first point for patients to engage with the health system and be referred to the specialist level if needed hoping to reduce costs and improve quality. However, the programme did not succeed as expected due to either lack of patients' compliance, who saw GPs as barriers to specialists or opposition from specialist doctors whose patient numbers fell (Phillips,2005). The reform went gradually back to its original format, particularly because of lack of evidence on quality improvement as well as increased expenses (Forrest,2003). The programme was revised later on to consider various capacities for GPs, like recruiting almost 5000 GPs in 2002 as hospitalists, who were responsible for patients' treatment and follow up after their referral to hospitals. The programme considerably reduced costs and improved quality of services for patients (Bodenheimer,2003). Furthermore, a group of GPs in the USA joined the managed care programmes which provide different health services packages to chronic patients like asthma and diabetes, to improve treatment and follow up of such patients as well as reducing their stay in hospital. Although, many studies to evaluate impacts of managed care have been conducted by executing organizations, there are ample evidence to show efficacy of such programmes in improving quality of services and patients' satisfaction (Bindman & Majeed,2003).

Another example of implementing FM, after years of practice on the basis of Soviet-style polyclinics (Rese et al,2005), is Lithuania, where a new system on the basis of primary health care and highlighting the GPs' role was gradually introduced in the 1990s. The main aim of the programme was to shift as many health services to the primary and outpatient levels (Lovkyte & Padaiga,2001). In contrast to the US setting, a fundamental problem was

a lack of GPs who consisted of only 10% of doctors, increased to 12% in 1998.

Lithuanians started a specialist training programme on FM which educated 1900 family doctors by 2005 (Starkiene,2005), who had training on management of particular cases like mother and child, elderly, chronic conditions, etc. They could relatively succeed to improve health quality and manage costs (Lovkyte & Padaiga,2001).

After three decades of successful implementation of primary health care (PHC) in Iran, the health system started to implement a referral-based primary care system concurrently with Behbar (rural insurance for all) in rural areas and cities of less than 20,000 population to enhance accessibility of services. Family medicine was identified as the most appropriate strategy to fulfil the programme aims. Therefore, parliament, along with the Management & Planning Organization (MPO), passed a bill in March 2005 which obliged the Medical Insurance Organization (MIO) to issue insurance log-books for all residents in the above-mentioned places, in order to provide FM (NUHSR,2007b). Prior to FM and during almost three decades of PHC network in Iran, behvarz was a focal point for services as well as gate-keeper. Doctors' presence in health centres was not universal and no defined pathway for referral to secondary care was in place. FM introduced doctors as gate-keepers and enhanced their accessibility for villagers. Besides, in cities, particularly big ones, there was no distinct role for GPs as gate-keepers. GPs were undermined and overlooked by both the public and policy makers. Besides, PHC provided only basic care (more details in Chapter 4). Such services used to be appropriate, but were no longer adequate. Health indices showed little progress or remained constant in recent years (NUHSR,2007a). In particular, management of long-term conditions and public well-being were not appropriately addressed in PHC. FM aimed to promote the notion of primary care, in which GPs perform as family doctors. S/he is a focal point and a gate-keeper who looks after his/her assigned community, not only to cure patients but also to promote health and take the overall responsibility for public wellbeing (More details in Chapter 4).

The family doctor (FD) and his team of other practitioners are fully responsible for the health of their assigned population. They provide care defined in a health services package (Chapter 4) to the public, and are responsible for referring cases to specialists and follow them up. Registered people are entitled to be referred only by a FD, otherwise, they must pay all expenses (10 times more).

4 Purpose of the thesis

Aim:

To identify facilitators of and obstacles to the implementation of family medicine (GP-based referral system which is being implemented concurrently with rural insurance programme for all: Behbar) in Iran.

Objectives:

- 1) To explore and select theories and approaches to implementation of change that might be appropriate for understanding implementation of FM in Iran.
- 2) To identify and categorize facilitators of and barriers to the implementation of change that have been identified in the literature.
- 3) To study facilitators of and obstacles to the implementation of FM in Iran.
- 4) To consider the applicability of selected theories in the context of Iran as a middle income country.
- 5) To identify ways in which the experience of implementation of FM in Iran might contribute to theories of policy implementation.
- 6) To identify policy implications to improve the implementation of FM in Iran.

5 Outline of the thesis

Implementation of FM in the Iranian health system, which is called the second biggest revolution in the health system after PHC in the 1980s by some stakeholders, has faced many ups and downs on its way. Appreciating Lindblom (1959) simulation who describes the policy process as what policy makers 'muddle through', this thesis draws on four overlapped disciplines: health policy, health services research, public policy and social science. It consists of 10 Chapters, dedicated to the subjects below:

Chapter 2 reports the results of the literature review of theories of implementation in public policy and varieties of approaches to implementation, from the traditional era of dichotomy of top-down and bottom-up, to the modern synthesising approaches. The chapter ends by summarizing varieties of theories in the field and selects those which contributed to the conceptual framework adopted.

Chapter 3 presents the process as well as findings of a synthesis of qualitative studies on facilitators of or barriers to implementation of change. The review created an evidence-based and comprehensive list of such factors which significantly contributed to the conceptual framework. It was also helpful in the study design based on semi-structured interviews as the main source of data collection, alongside other methods.

Chapter 4 provides a narrative explaining the development of FM from a need to design the policy and its implementation. It draws on several resources to provide an account of FM as the policy for reforming the Iranian health system as well as its implementation. The chapter investigates the history of primary care in Iran and its increasing trend of shortages which resulted in the reform. It describes preparatory measures to implement FM, development of the policy, and the principles of its implementation. It ends by presenting a few preliminary changes in health indices following implementation, though hesitating to link those changes to policy implementation.

Chapter 5 explains the methodological aspects of the thesis. A qualitative approach is justified and using purposive sampling both for individuals and health centres is described. The analytical approach is explained then, using mixed deductive and inductive analysis. The chapter ends by addressing the ethical considerations for the thesis and the rationale behind the organization of the result chapters.

Chapters 6, 7, 8, & 9 present findings under four interrelated categories which affected implementation: aspects of the policy; the existing environment; experience of implementation; and impacts of the policy on the public and local practitioners.

Chapter 6 reports findings of the analysis on aspects of the policy (content) which facilitated or hampered its implementation, considering both positive and negative aspects.

Chapter 7 investigates the effects of the existing environment and features of the Iranian society (context), both the health system and the general situation, on the implementation

of FM. The existing PHC network prior to implementation is addressed in more detail. General specifications of the insurance system in Iran, organizational capacity of the Iranian health system, and individuals' knowledge and insight to the policy are also explored. The chapter continues by addressing the legal and political environment of the implementation and ends with an investigation of the preparation for the reform.

Chapter 8 explains how implementation was undertaken (process), focusing on certain impacts of experiencing the implementation on blunting or facilitating it. The chapter reports the administration of implementation and investigates the cooperation between individuals as well as organizations. It investigates political management and explores the effects of communication between individuals and organizations. The chapter continues with an investigation of the appropriateness of training for stakeholders and explaining the reform to the public and ends by studying the impact of auditing practitioners' performance on implementation.

Chapter 9 reports on factors engaging individuals locally, either practitioners or the public and their representatives. It describes how their relationship with the policy and their interaction with the environment shaped their attitude towards implementation.

Chapter 10 is the final chapter of the thesis that summarizes the findings before explaining them based on selected theories of policy implementation discussed in chapter 2. It then considers the applicability of these Western theories in the context of Iran as a middle income country. The next section explains the ways that the thesis has contributed to the literature. Then, the methodological strengths and limitations of the study are addressed. It concludes the thesis and ends with the policy implications, embedded with addressing the areas in need of further research.

Chapter 2 Literature review: theories of policy implementation

Introduction

This chapter presents the results of a literature review of theories of implementation of public policy and varieties of approaches to implementation, from the traditional dichotomy of top-down and bottom-up and their challenges, to modern synthesising approaches. It aims to identify relevant theories and use them in a structured manner to establish an appropriate theoretical framework for analysing the findings of the thesis. The chapter begins with a brief history of implementation studies and its position in public policy research. Then the methodology of this review is justified. It continues with defining implementation. Theories and the main approaches to implementation are then introduced in three groups. The chapter ends by summarizing and reflecting on selected theories and incorporating them in a framework for analysis and discussion in Chapter 10.

1 Historical background and review strategy

Although a large number of reviews on policy implementation have been published, surprisingly little is known about the subject (Saetren, 2005). One reason perhaps is that accommodating implementation in a sensible place is difficult:

'There is (or must be) a large literature about implementation in the social sciences- or so we have been told by numerous people. None of them can come up with specific citation to this literature but they are certain it must exist'... 'It must be there, it should be there, but in fact it is not'.... 'How shall we persuade others that it is fruitless to look for a literature that does not exist?' (Pressman and Wildavsky, 1984, p.166).

Saetren (2005) concluded that most studies have focused on health and education, predominantly in high income, Western countries. There are a few notable exceptions including Kaler & Watkins, 2001; Kamuzora & Gilson, 2007. This review aims to identify, analyse, and synthesize the main stream contributions to implementation literature. Such a review is crucial for reflecting on the Iranian health sector reform and expanding theoretical understanding in a new background. Saetren (2005) highlights one particular problem in implementation literature as failing to explain how most reviewers arrive at their many interpretations. Jackson (1980) describes this as common among reviews in the discipline of social science and points out that it precludes judgements regarding validity of their

assertions and conclusions, although Saetren identifies a few exceptions: (O'Toole,1986; Hill & Hupe,2002; and Sinclair,2001).

As a result, a comprehensive account of implementation research, its origin, disciplinary foundation, and development patterns has not been narrated. Harrison (2004) takes the date back to the late 1960s and 1970s. It took almost two decades from about the time of the publication of Pressman and Wildavsky's book "Implementation" in 1973, until the end of the 1980s when an intensive academic debate was running about understanding of the phenomenon of implementation (Hill & Hupe,2002). They recommended considering three aspects in any review of implementation. First, they advise looking for studies before the word was used because it has been a matter of attention for many scholars for long. Second, many writers and researchers have been concerned about the phenomenon of implementation although not using the word per se. They might have approached it from different background than public policy. Third, different cultures and backgrounds might perceive implementation differently and in different shapes. (Hill & Hupe,2002). This indicates that implementation literature could be anywhere:

'If implementation is everywhere, is it ipso facto nowhere? ... No doubt this is why students of implementation complain that the subject is so slippery; it does depend on what one is trying to explain, from what point of view, at what point in its history' (1984:164).

It seems difficult and somehow unrealistic to define a structured manner for reviewing literature on the subject of implementation. In line with the purpose of the thesis, a theoretically based analysis of implementation of FM in Iran, I followed a heuristic approach in this review, aiming to include the main stream theories. I asked three experts in the field of health policy and/or public policy for a list of the main theories in the field of implementation, plus the names of those who contributed to those theories. This approach was chosen for two reasons: the realm of implementation theories is very broad to be covered in a structured way per se; and the thesis aims to use theories to analyse the process of implementation of FM in Iran. Its scope does not allow it to fill the longstanding gap of a comprehensive review of implementation theories.

2 Methodology of the review

The three experts each suggested books and journal articles from 1975 to 2005. One of them labelled articles as essential (fundamental contributions to streams) or

supplementary (ones which expanded aspects of the streams). I created an Excel database and cross checked for duplicates. My premise was books, particularly recent ones, are more comprehensive to open a window to common categories of theories and give me a general understanding of the main contributions. Therefore, I started with Hill and Hupe (2002), John (2002), Sabatier and Jenkins-Smith (1993), and Sabatier (1999). Then I updated the database by a bibliographic search of materials covered in those books.

I used the categorization of Hill & Hupe (2002): top-down, bottom-up, and synthesizing approaches. Then, I advanced the Excel database by mapping identified theories into the three categories. The list had a separate subgroup of essential and supplementary sources, in which I filled the cells based on opinion of the expert who made this distinction. Appendix V gives the final list of included literature.

To conduct the review, first I went through the database, read all essential articles and summarized them. Second, I read summaries of other articles, reading the entire articles in which the main theories were mentioned in the summary. Theoretical framework of the thesis was built mainly upon theories/approaches introduced in this review. This review is a small-scale attempt to present the major contributions in the field of policy implementation to draw on for the theoretical framework of analysis of my empirical research.

3 Implementation

Implementation has a subject which is often a policy. Policies may be made at many levels: central or local government; a multinational company; a local business, a school or a hospital (Buse et al,2005). There are varieties of interpretations of implementation of policy. Some refer to it as the stage after a policy is formulated, encompassing the development of operational plans by hierarchical levels of government and other organizations to put the policy into practice (Hill & Hupe,2002). They argue that separating implementation from formulation facilitates appreciation of the ways that interaction among diverse policy actors shape policy outcomes, particularly for analytical purposes. Mazmanian and Sabatier (1983) also define stages from making a policy, followed by policy outputs (decisions), and impacts due to which the policy could or could not be revised. This is somehow echoed by O'Toole (1995) who highlights that policy implementation bridges the governmental intention and actual outcomes. These

approaches separate policy formulation from implementation and consider a linear sequence in the process of public policy, reflecting mechanical and hierarchical views towards implementation.

Pressman and Wildavsky (1984) emphasize that a policy must exist to be implemented prior to implementation. Contradictory to their initial top-down view of implementation, they find it difficult to distinguish between a policy and its implementation. They describe implementation as embedded in the policy.

Others have expressed a more dynamic view of implementation. For instance, Barrett and Fudge (1981) were more concerned about policy-action relationship, rather than transmitting policy into a series of consequential actions in mechanical order. They consider implementation as a process of negotiation and interaction over time between policy makers and those who put it into practice. This is a less mechanical view and leaves more room for actors' say in the process.

Various definitions of implementation show the complexity of the subject. How implementation gets defined becomes the foundation of the three categories of theories of implementation: top-down, bottom-up and synthesizing theories.

4 Theories of policy implementation

Policy implementation has traditionally taken two approaches: top-down and bottom-up (Ham & Hill, 1993). Top-down models consider consequential stages to the process of policy comprising problem definition, policy formation, implementation, and evaluation. From this perspective, policy formulation must be conducted prior to implementation, which is basically practicing that policy (Sabatier & Mazmanian, 1979). In contrast, bottom-up approaches tend to be more pragmatic by approaching policy change as a dynamic and interactive process. This perspective emphasises the need to understand implementation systems and the actors responsible for implementation, in order to understand why policies do or do not achieve expected outcomes. The gap between anticipated goals and actual outcomes of implementation is a demonstration for some scholars in bottom-up approach of how policy is recreated through the process of implementation, rather than an implementation failure (Hill, 1997).

One of main differences between perspectives lies in their approach to actors' engagement in the policy cycle and the extent to which they are able to affect the policy implementation through their actions and judgement. The bottom-up perspective is focused around lower level actors and gives centrality to them. It leaves plenty of space for discretion of this group of actors that might affect the implementation through negotiation, interaction, and bargaining. Whereas, top-down approaches consider no or little room for interaction and negotiation between hierarchy of levels in the policy cycle. They are biased around small group of top policy makers. Policies are commands from top people which must be put into practice by subordinates. Therefore, only little chance remains for discretion, revision and bilateral communication to affect the policy based on this approach.

Other approaches, called synthesizing theories, are attempts to combine the advantages of the two traditional approaches. Their focus is reconciliation between aspects of top-down and bottom-up to reach a more realistic manner of implementation analysis. Also called bargaining or evolutionary frameworks (Grindle & Thomas, 1991), bargaining between different stakeholders is the basis of analyzing the outcomes of implementation in these approaches. The following sections introduce the three approaches and major examples.

4.1 Top-down approaches (implementation as separate from policy)

The principle of top-down theories is making a clear distinction between policy formulation and execution. The approach to the policy process is a linear sequence of activities. Observing a gap between the intended plan and what occurs as a result of policy is common and is based on the concept of perfect implementation. Premier scholars including Hood (1976) saw desirable implementation as a product of good harmony between external factors like availability of resources and supportive political environment, and administration of policy implementation. They reasoned that many government reforms are concentrated on efforts that devise systems in which the possibility of implementation according to intended policies increases. Such an approach has roots in early studies of implementation gap, in which policy makers were interested to know why such gaps existed and how they can manage to bridge the gap.

Van Meter and Van Horn (1975) hypothesized that implementation would be most successful in places where only marginal change is required and there is a high

consensus on goal. They put six variables into the model, which are dynamically linked to the outcome performance, including: policy standards, resources and incentives, the quality of inter-organizational relationship, the macro environment, and the disposition or response of implementers. They talked about multi-dimensional characteristics of policy, organizations, actors and environment into consideration. They considered a linear relationship between variables that was innovative. However, they defined an environment for interaction which was too realistic. Nonetheless, they were not many scholars at that time to take inter-related categories of variables into account.

Bardach (1977) described the perception of implementation as 'involving games' in which a variety of games might be played. His approach is considered top-down because he advises policymakers as the top players of the game that in order to achieve the desired outcomes, they must greatly care about the scenario writing process and structure the game in the right way. This approach fails to acknowledge the importance of ownership of a policy among medium and lower level actors. It does not consider the importance of interactions among the hierarchy of actors as well as their authority for discretion, which can alter the entire policy intention. Also, there is no room for feedback and revising the policy within the implementation process in this approach.

Pressman & Wildavsky (1984) separated policy formation from implementation. They studied the federal mandated programme of economic development in California, USA in the 1970s and explained the extent that successful implementation depends upon linkage between different institutions and departments at the local level. They assume actions as dependent variables which depend on the number of links in an implementation chain. Inevitably the degree of cooperation between agencies required making those links very close to 100%, if a situation is not to occur in which a number of small gaps cumulatively end up with a large gap. The idea of implementation deficit was born at this point in their theory which makes implementation mathematically analysable. The key factor for effective implementation for them is a system which clearly shows the causal link between goals and actions in achieving them. They highlight the importance of clear goal setting, prepared administration, and good command transfer from centre to periphery, as essential prerequisites for successful implementation. Their view towards implementation was mechanical, trying to rationalize that the linear consequence of factors results in intended implementation.

Sabatier and Mazmanian (1980) expanded the approach by suggesting the role of feedback as well as consistency in the policy itself. In their view, analysing the implementation of a top-level policy decision is begun by clarification of four issues:

- 1- The extent to which the actions of implementers are in line with policy decisions;
- 2- The extent to which the policy impacts are consistent with its objectives over time;
- 3- Principal factors affecting the policy implementation, both political and relevant to the policy itself;
- 4- The extent to which experience affected formulation of the policy over time.

They brought new notions to the top-down approach by taking into consideration the importance of consistency between the policy and implementers' discretion. Implicitly, they emphasized policy impacts as important in feeding into implementation and decision making. This opens doors for feedback which in turn might fertilize the soil for learning over time and taking influential ongoing factors into consideration. One might categorize this approach as bargaining and therefore closer to a bottom-up perception of implementation. In fact, Sabatier followed up this route and became a pioneer of such an approach later on in the 1990s (later in this Chapter). Nonetheless, a clear division between policy formation and implementation is noticed in their account and a linear consequence of the process is observed in the approach.

Hogwood and Gunn (1984) defend their top-down view on the ground that those who make policy are democratically elected and therefore eligible to dictate. They legitimized such an approach by looking at democracy as a ground for ruling with absolute power. Elected policy makers are eligible therefore to do whatever they decide and reach goals through whatever trajectory they choose. This approach overlooks complexities of human beings, organizations and interactions between them. It also ignores other mechanisms in democratic governments such as parliament, which monitor quality and appropriateness of elected leaders' decisions.

4.1.1 Summary and discussion

The top-down perspective has contributed to the history of implementation theory. Chronologically, modern categorization of implementation theories started from early developments of top-down. Different scholars expanded the field from diverse points of views, some of which, including Sabatier and Mazmanian (1980), also contributed to the

next generation of approaches: bottom-up. However, it failed to recognize a few crucial factors, as a result of which the bottom-up was born. Some of the most cited flaws are:

- 1- Over-emphasizing central policy makers, while neglecting other levels of actors in implementation process.
- 2- Over-estimation of government action versus other factors in analysing implementation.
- 3- Overlooking complexities of reality in implementation, where many actors including individuals and organizations are involved, rather than a single government as commander and all others as followers.
- 4- Very little chance of having all preconditions prepared prior to implementation.
- 5- Lack of dynamic approach to implementation process, in which policy is subject to change and revision because of interactions, negotiations and feedbacks.

The main criticism is that the reality of implementation is messier and more sophisticated than even the most complete top-down approaches can cope with. It is '*neither a good description of what happened in practice nor a helpful guide to improving implementation*' (Buse et al.,2005:124). Even early contributors, including Pressman and Wildavsky (1984), emphasized interaction and a cooperative environment between actors and highlighted the need for bargaining relationship to move implementation forward. This was to reflect the importance of players other than top policy makers to narrow the implementation gap, which is main subject of the bottom-up approach. Such failures moved scholars to approach the subject from another end of spectrum and led to the birth of the bottom-up approach.

4.2 Bottom-up approaches (implementation as a part of policy)

Limitations of the top-down approaches, particularly lack of accounts for actors other than top policy makers resulted in more focus on front line staff opinion and rejected a linear configuration of implementation. Bottom-up considers implementation as consisting of intertwined phases in a policy cycle. The focus is on actors at lower levels. Bottom-up views developed during the 1980s to compensate for the lack of attention to frontline staff in traditional top-down views. Below are main contributions to the bottom-up approach.

Lipsky (1980) presented the idea of street-level bureaucrats and emphasized the role of frontline staff in the policy cycle in 1971, even before Pressman and Wildavsky (1984)

published their book on top-down approaches. He analysed the behaviour of front-line staff in policy delivery, whom he called 'street level bureaucrats', including those administering social welfare benefits, social workers, teachers, local government officials, doctors and nurses. He re-conceptualized the implementation process, especially in services which were highly dependent on the actions of significant numbers of professional staff, such as in health and social services. Those people generally work in conditions that are not conducive to the adequate performance of their jobs, facing high demand for their services but lacking the organizational and personal resources necessary to do the job well. They have to routinely make difficult resource allocation decisions about who gets services or not (Elmore, 1978; Hudson, 1989). Lipsky mentions that implementation depends highly on bottom level actors' understanding of policy, their sense of ownership, and degree of innovation to face challenges.

Observing a number of discretionary decisions by front-line staff, he argues that public policies are essentially the routines that staff establish and the mechanisms they apply to cope with uncertainties and work pressure. He attempted to shift the focus of implementation failure from bottom level staff to top policy makers. He implicitly links implementation failure to the lack of commitment of senior actors to provide adequate resources as well as making the work environment appropriate. He highlights that people join services generally to do good and to be committed. Huge workload and uncertainties coming from top-level actors make them reluctant, so they lose faith in the policy, which leads to implementation failure. His focus is to shift attention to actors at the lowest level of implementation. However, such efforts overlook the important role of higher level actors in the process. Thus, his strategy to remedy the deficits of top-down perspectives ends in over crediting lower level players. The approach acknowledges frontline staff's discretions to cope with the dynamics of implementation, which is a main shortage in top-down. However, it overemphasizes street-level players' role in policy cycle and is significantly biased in their favour. Lack of balance between top and bottom level players in his approach makes it difficult for applying in real implementation which is messy, multi-dimensional and stretched among all levels and groups of stakeholders.

The neglected position of front-line personnel in implementation was also emphasized by other scholars, who contributed to the perspective. Walker and Gilson (2004) studied the implementation of fee removal policy in South Africa. They realized that nurses approved the principles of the policy. However, they were negative towards it in practice because of practical difficulties. For instance, introduction of fee removal increased their workload.

Whereas, the policy considered no incentive for staff as well as the drugs supply being insufficient. Staff lost their faith in the implementation therefore and started to invent new routines based on their discretions. Nevertheless, motivated staff compensated the shortages by their courage and commitment. The authors concluded that developing inter-personal competence and trust within organizations is necessary to strengthen implementation (also Elmore, 1978). This is one of main missing points in top-down approaches, considering which bring greater sense of ownership and interaction to implementing a new policy.

Rothstein (1998) contributed to the perspective by applying it in a specific setting. He emphasizes the special application of bottom-up perspectives to the delivery of services such as health care. Because of the dynamic environment of such services, staff discretion is essential to respond effectively to customers' needs. This approach highlights the relationships between central, regional, and local agencies in influencing policy. One of outcomes of this view is dividing labour between hierarchies of actors, rather than privileging central policy makers over local staff, which reduces their motivation in implementation. He moves forward to a new generation of approaches in which actors engage in implementation in a mutual and cooperative way.

4.2.1 Summary and discussion

The common concept in bottom-up approaches lies around the indication that policy is a problematic concept and implementation is a complex task. It suggests looking at implementation as a 'property' in which different actors may make different claims as to its true features. It emphasizes that despite a top-down approach that looks at the implementation process as a depoliticized step, political processes occur throughout implementation. Therefore, it assumes bottom level actors are the most crucial ones during the implementation.

There is no doubt about the importance of frontline staff for putting policy into practice. However, the common deficiency of the perspective is an exaggerated emphasis on bottom-level staff and fading top level engagement, by which multi-lateral negotiation and communication among all levels are overlooked to move implementation forward. Theories have to balance the role of structure (institutions), agency (participants/interests), ideas (how policies should work), and socio-economic circumstances. Although a bottom-up approach rightly recognizes the crucial role of front-line staff, it cannot keep balance

between them and other actors. It also risks becoming prescriptive. Some of its most-cited flaws are:

- 1- Lack of analytic distinction between policy formulation and its implementation, which makes it difficult to distinguish the influence of different actors in implementation.
- 2- Undermining direct and/or indirect central influences in shaping the organizations in which bottom-level staff operate, react and make discretions.
- 3- Difficulties in monitoring performance and evaluating implementation or specific policy impacts, due to lack of distinction in decision points.

4.3 Towards a pragmatic understanding of implementation: Synthesizing theories

Table 2.1 summarizes the main aspects of the two traditional approaches. Highlighting pitfalls of such approaches to portrait complexities of implementation, synthesizing theories are built on the theories of top-down and bottom-up to advance the approaches for a more realistically addressing implementation. Because of the pitfalls in both, researchers have called for a synthesis of the two (Sabatier, 1991; O'Toole, 1986).

Table 2.1 Main aspects of top-down and bottom-up approaches to implementation

	<i>Top-down</i>	<i>Bottom-up</i>
Initial focus	Central government decision	Local implementation actors and networks
Identification of major actors	From top-down and starting with government	From bottom-up, including both government and non-government
View of the policy process	Largely national process, proceeding from problem identification to policy formulation at higher levels to implementation at lower levels	Interactive process involving policy makers and implementers from various parts and levels of government and outside in which policy may change during implementation
Evaluative criteria	Extent of attainment of formal objectives rather than recognition of unintended consequences	Much less clear- possibly that policy process takes into account of local influences
Overall focus	Designing the system to achieve what central/top policy makers intend- focus on 'structure'	Recognition of strategic interaction among multiple actors in a policy network- focus on 'agency'

Sources: Sabatier (1986); Buse et al (2005)

Synthesis depends on recognizing the legitimacy of the complex formulation of the topic. Goggin et al (1990) call attempts to resolve the dispute as 'synthesizing' or 'third-generation' with the proposition that choice of methodology may depend upon the subject and circumstances of the policy being implemented. Such challenges led to the efforts which pick out key ideas from each traditional approach, generally called 'synthesizing approaches'. Some of the most cited synthesizing theories are introduced in this section.

4.3.1 Multi-actor collaboration

Barrett and Fudge's (1981) interpretation of implementation was innovative in their era, when top-down was leading the course. They emphasized a dynamic pattern of policy implementation which undergoes interpretation, revision and modification. They consider special room for discretion among actors because of their different assumptions. Similarly, Hjern and Hull (1982) emphasize '*organization-theory*' in implementation studies in which none of actors has privilege over other actors. Such approaches echo the dynamic link between diverse group of actors and accommodating them in an organizational setting for implementation. Their approach makes distance from bottom-up by considering equal roles for actors in the frame of organization, which is not biased around frontline staff. It bridges traditional approaches with bargaining views and third generations of theories of implementation.

O'Toole in much of his work tries to connect the concerns in the implementation literature and the contributions of organizational sociologists (1986). Numerous disciplines contribute to the implementation literature and he calls for cross-disciplinary comparison across them to develop an appropriate approach. He argued that it is not always easy to match policy objectives with inter-organizational arrangements (O'Toole, 1993), so this is not necessarily a way to successful implementation (O'Toole, 1994; 1997). He reemphasized the role of context, particularly 'constitutional choice'.

Linder and Peter (1989) also promoted the idea of multi-actor collaboration by taking multi-layer players into consideration. They mention two general sets of variables which affect policy implementation: capacity of the government and complexity of the policy. The interaction between these two has been at the core of attempts to reconcile the top-down and bottom-up approaches, which reemphasizes interaction and context.

Rothstein (1998) developed the idea of multi-actor collaboration by emphasizing the role of state and institution in implementation, particularly in relation to social welfare. The main question for him was the manner in which public services must be organized when the nature of the activity – the advantage or service to be provided or the behaviour to be regulated – makes it difficult to realize this model of state action. He attempted to answer that question by fusion of empirical state theory with normative state theory. He studied the influence of various public administrations on implementation. He emphasizes that even with uncertainty and lack of knowledge, the state must do something in some circumstances. For him, the best ways to organize policy implementation depend on the kind of the activities that the organization must do, which is substantially based on organizational theory. Based on this perspective, the study of implementation is a form of studying organizational behaviour which aims at understanding individuals' and groups' behaviour and performance within institutional patterns of structure (Mullins,2002).

Rothstein's contribution to implementation theory has two main directions. First, it resolved the traditional argument concerning accountability by recognizing the multiplicity of ways policies may be legitimated. Second, it helped structure the relationship between policy makers, who are somehow autonomous, and the public. He advanced the approach by incorporating the role of institutions and a macro vision of organizations. He separates policy formation from execution issues (top-down) to identify conditions under which policies may be designed to minimize implementation problems. However, his main contribution is to emphasize the role of organizations, which legitimizes bargaining in implementation.

There is a strong link between policy analysis and organizational studies, although the former applies to macro-levels of state or government, whereas the latter tends to focus on the level of firms, located at the meso level. Organizational studies are based on the premise that organizational behaviour can only be understood in context. They examine behaviour within organizational settings, maintaining that change in individuals usually follows change in organization (Curry,2000). Soft and divergent characteristics of organizational studies suggest that it is unlikely to produce universally agreed findings within a quick timescale (Tranfield & Starkey,1998), due to which the approach seems inappropriate for studying implementation process. In addition, Weible (2005) argues that organizations are unable-on their own to produce the necessary resources to achieve their goals, so they must acquire additional resources from others. Nonetheless, the approach

seems helpful in monitoring and analysing outputs of implementation within a realistic timeframe.

4.3.2 *Rational Choice Theory*

Rational choice theory assumes that individuals have the capacity to act as rational agents (Ward,1995). It links organizational theory with individuals' roles and capacities inside an organization. It recognizes individual choice as the foundation of political action and inaction and explores individuals' reaction to constraints, instructions and patterns of group interaction (John,2002). The theory aims to understand individuals' reaction to choices made by other actors. It investigates the reasons actors decide to cooperate in implementation or not, particularly on many occasions that they are not part of making the policy. The theory builds on principles about what individuals are likely to do in complex settings of implementing change and adapting to institutional rules.

Modern Rational Choice theory is sensitive to the importance of cultural and historical contexts as well as the interplay between changing institutions and the choices of actors, which provides rational choice with its realism and analytical power. March and Olsen (1989) argue that institutions are the main independent variables in structuring political decisions and policy outcomes. Institutions simplify decision-making by providing options that are more or less readily available and plausible. They provide familiarity, reduce psychological uncertainty and eventually lead to beliefs, which routinize of meaning as well as the establishment of coalitions. Moreover, institutions rationalize idiosyncrasy, heterogeneity and diversity by shaping decision makers' preferences, thereby introducing a measure of uniformity. Altering incentives or disincentives, changing the balance of power among policy makers, introducing new technology, or shifts in organizational secondary beliefs open windows for non-incremental policy change.

Rational choice theory provides room for ideas, beliefs, and interests to play roles in actors' interaction with the policy and implementation constraints. However, it fails to recognize many occasions in which agents do not or cannot act rationally for several reasons. Individuals are sophisticated agents that might act irrationally and opposite to predictions even if conditions are on their side. There are many other factors than rationality that affect their behaviour, undermining the applicability of the theory in some settings. Nevertheless, the theory is a useful tool to explain actors' behaviour in organizations, particularly in conjunction with other complementary frameworks.

4.3.3 Communication perspectives

Expanding the emphasis on collaboration between actors in policy implementation, Lane (1987) saw the problem of implementation studies embodied in the meaning of the word and suggested that implementation is seen as involving both notions of an '*end state or policy achievement*' and '*a process or policy execution*'. His emphasis was on two alternative concepts: responsibility and trust. While responsibility concerns the '*relationship between objectives and outcomes*', trust concerns '*the process of putting policies into effect*' (p.542). He argues that top-down approaches emphasize responsibility, while bottom-up underlines trust. The main issue in this approach is how the centre can trust the periphery and how the periphery can be accountable to the centre. His approach addresses the communication gap and the degree of engagement by actors in the field. It is a reasonable reconciliation between ignoring frontline staff in top-down approaches and underestimation of high level actors in bottom-up approaches. However, it fails to explain how such interaction could actually be established in complex situations of implementing controversial policies.

Goggin et al (1990) developed these ideas and presented a "communication model" of implementation in which the main emphasis is upon factors that affect the acceptance or rejection of messages between layers of government. Their model escapes from the rigidity of top-down approaches and difficulties in handling feedback between implementation and policy formation. It concentrates on communication between different levels of government that are responsible in policy execution. The model goes beyond the simplicity of the responsibility and trust dichotomy. It creates an environment for actors' collaboration and idea exchange and engages with features of implementation in a more realistic fashion. However, it is rooted in federalism case studies in the USA and its degree of universal application is contested.

One of well-recognized models of putting policy into practice, mapped into communication models and interactions between different layers of actors is 'principal-agent' perspective. It derives from a conjunction of organizational theory and institutionalism, communication models, and acknowledging actors' discretion in executing policies. The perspective is not a theory of implementation per se, but it applies the achievements of management theory for better practice and more efficient performance in implementing change. It states that sub-optimal policy implementation is an inevitable result of the structure of institutions of modern government, in which decision makers (principals) have to delegate responsibility

for the implementation of their policies to their officials (e.g. civil servants in the Ministry of Health) and other agents (e.g. managers, doctors, or private contractors) who they only indirectly and incompletely control and who are difficult to monitor (Buse et al,2005). It has been well received as a pragmatic platform in policy execution by different organizations.

The perspective considers that agents have discretion in how they act on behalf of political principals and may not even see themselves as primarily engaged in making a reality of the wishes of the principals. Principals can only indirectly and incompletely control agents who are difficult to monitor (Pollitt,1993). Tuohy (2003) points out how vital the trust-based principal-agent relationship, as well as the contractual relationship in which actors are relatively well-informed, are to overcome implementation gaps. Since agents have their own views, values, ambitions, loyalties, and resources, discretion opens up the potential for ineffective or inefficient translation of principal's intention into reality by which policy implementation can be hindered. The catch phrase of the reformers is that the government should be '*steering not rowing*' the ship of state (Osborne &Gaebler,1992), confining itself to what only it could do best. In order to increase the quality of services, the principal-agent perspective considers performance indicators to ensure the delivery of services is satisfactory, and to assess whether agents' performance meets principal's objectives and improves services or not. Nonetheless, the perspective does not explain the institutional interests and values of principal, nor the impact of principals' approaches to the policy as well as the way that the policy is introduced.

4.3.4 Advocacy coalition framework

Paul Sabatier developed a perspective called the 'advocacy coalition approach' with Jenkins-Smith (1993), which approaches the policy process from a more holistic view and with more emphasis on actors (bottom-up). Sabatier's (1999) concept of advocacy coalition has the virtue of highlighting the possibility of conflicts in policy because of the simple divide between policy makers and those who put the policy into practice. Interaction between actors who generate, disseminate, and evaluate policies in subsystems runs the policy forward. Because of lack of time and inclination, the public are not members of a sub-system in the advocacy coalition approach.

Sabatier defines advocacy coalitions as a small number of organized actors and networks within a large number of participants in each sub-system, who are in conflict with one another, because of competition for influence over government institutions (2007). A

distinct set of norms, beliefs, and resources distinguishes one coalition from another. By definition, many professional groups such as researchers, civil servants, members of civil society organizations, politicians, and journalists are considered as members of advocacy coalitions. He highlights that the core norms and beliefs of an advocacy coalition do not change, unless a major change occurs in the external environment (such as political regime change, economic recession, etc). The perspective provides a rather self-evident claim that major policy change in the wake of external shocks is more likely if an incumbent coalition member revises core aspects of its belief system (Nohrstedt, 2005). Otherwise, policy changes as a result of policy-oriented learning in the interaction between advocacy coalitions, which might take as long as decades.

Sabatier also highlights the role of policy brokers as important players in his model (1999, 2007). Coming from a variety of sources, from civil servants experienced in a particular sub-system to committees of inquiry who are in charge of agreement production, these mediators make effort to find feasible compromises between the positions advocated by the multiplicity of coalitions. They are an influential and motivated group of actors who bridge the communication gap and facilitate putting policy into practice by advocating stakeholders.

Over the last decade, advocacy coalition framework has been widely used in analysing public policy implementation particularly in environment and education sectors. The approach has not been frequently applied in health sector. It advances the initial approach of Sabatier and Mazmanian (1980) by accommodating a more dynamic view of implementation and recognizing all actors' beliefs and values in the policy cycle. It opens windows for revising the policy and fitting it to the context by learning and feeding back into the cycle. Its origin is in federal political regimes like the USA. However, it has the capability to be fitted into settings with few features of democracy.

4.3.5 Summary

Synthesizing approaches are worthy efforts to reduce the limitations of traditional theories of policy implementation. They attempt to reconcile the biased direction of top-down and bottom-up approaches towards the two ends of actors, by emphasizing interaction among actors at different levels of the policy cycle. Somehow complementary, they cover different aspects of the complex and multi-dimensional aspects of implementation. They bring context and macro politics to considering implementation and highlight organizations and

actors' inter-relationship. Effective communication and feedback are aspects that are highlighted in synthesized approaches, as crucial dimensions that were overlooked by traditional approaches. Emphasizing the beliefs and values of all actors was a revolutionary aspect that resulted in acknowledgement of discretion, particularly for frontline personnel. The broad umbrella of this third generation of implementation approaches also led to innovative practical models of policy execution, which are supposed to contribute to better implementation. The principal-agent perspective is among well-received methods based on many experiences of implementation. It aims to create a more efficient platform for implementation and to narrow assimilation gaps that hinder the process.

Even though synthesizing perspectives are more pragmatic to explain implementation, none of them are comprehensive enough to portray all aspects of reality. Studying implementation is investigating human behaviour, action, and interaction in a complex setting. To draw a picture of implementation that accommodates as many aspects of reality as possible, including a tailored conjunction of theories in the analytical framework seems to be inevitable.

5 Discussion

Studying implementation of a policy requires a multi-disciplinary approach that must explain the interaction between institutions, interests, and ideas (Buse, 2008). There is no single comprehensive theory to explain all aspects. It is a symphony rather than a solo performance that is characterized as:

'mountain islands of theoretical structure, intermingled with and occasionally attached together by foothills of shared methods and concepts, and empirical work, all of which is surrounded by oceans of descriptive work not attached to any mountain of theory' (Schlager, 1997, p. 14).

Implementation is a complex notion, studying which needs complementary approaches. Such a collective approach is crucial to cover different aspects and provide an understanding of the phenomenon. This thesis aims to create a comprehensive portrait of implementation of a policy based on robust theoretical analysis. A theoretical structure is essential to explain diverse components of implementation. Such employment of theoretical frameworks is a heuristic measure to accommodate as many aspects of implementation as possible and to see the implementation through variety of lenses. It

aims to provide a clearer and more advance understanding of implementation. The focus here is to reflect on theory and map finding of study into principles of existing literature. Such an approach might or might not result in advancing the theoretical literature.

Health policy, like other branches of public policy, consists to a large extent of patching and repairing, building on and learning from experience (Heclo,1974). It is beyond the scope of this thesis to compare various theories to address their strengths and weakness. The thesis rather seeks to analyse the implementation of a policy (family medicine) in a particular setting (Iran) in order to identify facilitators of and barriers to the implementation, aiming to improve the process.

As John (2002) points out, approaches and theories are not rivals. Rather they can be used as complementing each other and portray a clearer picture of implementation. Also, Antonsen et al (2000) recommend using a strategy of 'filling out' when analysing complex empirical problems, while at the same time keeping the theoretical framework relatively simple. Several scholars have effectively combined divergent theoretical perspectives in their empirical studies including Spillane,1998; Cauthen & Amenta,1996. Given that every approach had its own pitfalls, systemization and generalization is almost impossible. To overcome the complexity, I took Elmore's (1981) advice on 'backward mapping'. He suggests that in the study of complex policies, it would be valuable to triangulate accounts by using different theoretical models to obtain a satisfactory demonstration of what happened. Reviewing the theoretical literature on implementation granted me a better understanding of strengths and weaknesses of various approaches and provided me the opportunity to fill out the theoretical framework.

Some argue that picking a particular theory could enhance the degree of generalizability of findings by creating a more testable environment of the participants' behaviour (John,2002). However, because my main purpose was to shed light on the implementation of FM, only 'multiple lenses' or a 'multiple framing' approach could portray the reality and give an explanation of the process (Cairney,2007). With that in mind, I followed John's (2002) suggestion of using different theories in the theoretical framework as a part of an overall explanation.

6 Conclusion: Selection of a theoretical model for studying implementation

There has been much less attention paid to how to do the analysis, and what research designs, theories or methods best inform policy analysis (Walt et al,2008). No policy analyst can use all the tools of the trade all the time. Rather, the contention throughout is the attempt to draw on different theoretical aspects which are essential. Like rational decision making, an infinite wealth of potentially relevant information to choose from but finite resources with which to choose, is the main problem in most health policy analysis (Cairney,2007). As a result, focusing attention on one or a few particular aspects of explanation is inevitable. Although employing more than one theory/framework does not solve this problem, it highlights a series of perspectives through which to view the same phenomena.

One of well-known public policy frameworks is the stages heuristic (Brewer & DeLeon 1983). It divides the public policy process into four stages: agenda setting, formulation, implementation, and evaluation. Analysts have criticized the stages heuristic for presuming linearity to the public policy process that does not exist in reality, for postulating neat demarcations between stages that are blurred in practice, and for offering no propositions on causality (Sabatier,2007). Having this in mind, to understand and explain the implementation process as a whole and to make sense of what actors actually did as well as their reasons for that, I incorporated my selected theories in a four-fold framework of viewing implementation developed by Harrison (2004), with some modifications. Since the model is largely heuristic, it can be retained, modified, or abandoned in keeping with its usefulness, rather than being subject to direct tests of validity.

I was not neutral towards contradictory approaches when adopting the framework. Harrison states that the four-fold framework captures much of the variation within past research and theorizing on implementation. The first frame views implementation as administration. Although I was aware of failures of mechanical views in top-down approaches, such as the failure to recognize interest groups and the lack of ownership it leaves behind in lower level staff, I incorporated the concept to reflect the popular assumption that governmental bureaucracies are instruments for policy implementation. Crudely, it provides a focus on the government capacity by emphasizing how institutional design and socio-economic conditions (context) constrain and shape the process of implementation.

The second frame was a bargaining view, albeit I knew the difficulties of studying implementation by taking a bottom-up approach which makes no distinction between different phases of the policy cycle, and fails to acknowledge that policy agendas and actors' interests are themselves products of negotiation and interpretation. The approach focuses on sub-system complexity by emphasizing how the beliefs of participants, their relationship and networks, and inter-organizational dynamics shape and constrain the implementation. As particular approaches to study bargaining among actors at different levels, I incorporated the notion of a policy network to investigate the interconnections of actors with each other (Rhodes, 1988) and understand their common values and interests (if there were any) to mobilise and integrate them (Hajer & Wagenaar, 2003) to form and implement the policy (Marsh & Rhodes, 1992). As a well-known attempt, few aspects of the advocacy coalition framework are used to interpret the crucial role of policy brokers in compromising the policy components as well as the position of different advocacy coalitions in affecting the policy agenda and the process of implementation. Adopting this, I was aware of Buse et al's claim that the model works fairly well in explaining policy reforms over a decade in relatively decentralized, open, federal, and pluralistic political systems such as the USA (Buse et al, 2005, p.133), a very different context from Iran.

The third frame treats implementation as a process of interpretation by identifying important forces that were overlooked by the more instrumentally-oriented administrative and bargaining frames. It emphasizes actors' understanding, priorities, and discourse, pointing to the possibility of delayed consequences of implementation such as changing actors' beliefs, norms, and values. Although the 'Multiple Streams' framework by Kingdon (2003) is not categorized as an approach to implementation, I incorporated that into the framework. The approach is an explicit attempt at applying the insights of the organizational 'Garbage Can' logic of temporality, timing and chance to the national political system, albeit it is more specifically directed at understanding the policy process. The core of the framework for Kingdon is that the policy process can be conceptualized as distinct streams of problems, policy and politics, and the coupling of these streams that enables the setting of the agenda for new political initiatives and their respective development. The perspective has also been used to analyse the entire process of interests while making a decision (Zahariadis, 1995). A further contribution of the interpretive frame is its focus on diversity among actors. However, Harrison (2004) claims that there are few clear guidelines for applying the frame in research and most of these studies concentrate on policy formulation more than on implementation (see more in Chapter 10).

The fourth frame looks at implementation in terms of the institutional structuring of political processes and organizational practices. It emphasizes the ways that social and political institutions structure interactions among stakeholders. Institutional arrangements shape both the substance and the process of policy making (Epsing-Anderson, 1994). The frame provides a valuable supplement to the distinctive concerns of the other analytical frames and draws attention to ways that policy making is embedded in social structures and norms that extend beyond the formal political system. As particular contributions to the framework, I used the advantages of the Institutional Rational Choice perspective developed by Scharpf (1997) and Ostrom (1999), to explain action and motivation of central policy makers as well as staff within a structural context of health system in rural areas. This encompasses an interest for rational agents pursuing their self interests as well as interest for how institutions affect this behaviour. Actors can be a group, functioning as a 'composite actor', which can include as many of the actors involved in the policy process such as: interest organizations, influential policy makers, purchaser/provider, etc. Rather than analysing the internal actions of one organization, it can often treat the organization as a single actor. On this basis, the framework perceives the policy process as a strategic interaction between actors, like a 'game'. The theory is also good in providing a dynamic link between the micro and the macro levels which is often missing in other approaches. I used this frame to understand composite actors, either individuals or organizations, their preferences and mutual interaction, and the role of ideas and ideologies to shape, perceive and implement family medicine and rural insurance.

To make the fourth frame more comprehensive, I incorporated some aspects of communication models into it. I used the principal-agent perspective to illustrate how particular individuals acted as governmental delegates, as well as how their own norms and values affected the policy implementation (Howlett & Ramesh, 2003). In particular, the perspective was useful to explain the purchaser-provider split, as well as lack of decentralization in Iran, which is important to increase quality of services and practitioners' satisfaction (Bossert et al, 2003).

Figure 2.1 illustrates how four components of the framework are used to explain various dimensions of implementation of FM in Chapter 10. In summary, each framework focuses attention on different aspects of implementation and emphasizes different outcomes. The multiple frames illuminate possible consequences of policy implementation that might be overlooked if only one is used. In addition, the framework fairly accommodates five political science approaches/theories that can explain formation and implementation of a policy:

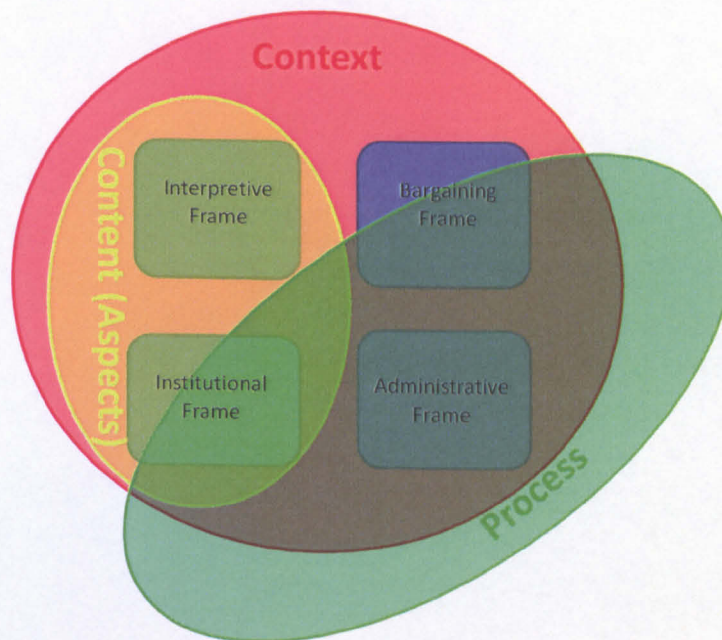


Figure 2.1 The four-fold framework and the link of each frame to explain findings.

institutional, group and network, socio-economic, ideas-based approaches, plus rational choice theory (John,2002). Though the approaches usually co-exist in political science at the same time, they have also emerged in reaction to each other, and as response to the failures of earlier accounts of policy change and variation. A further advantage is that apart from some particular theories and approaches that are incorporated into this thesis, its general concept has been successfully used to analyse health system reforms in the United Kingdom, Netherlands, and Sweden (Harrison,2004).

Nonetheless, it is important to contextualize the health policy environment in order to understand the challenges to methodology and theory. Furthermore, no prescription or advice to policy makers is worth much if it is not based on an understanding of the world of policy making (Klein & Marmor,2005). Having in mind that most ideas and concepts in policy analysis are derived from studies in high income countries, transferring such concepts into the middle income setting like Iran needs to be undertaken with caution (Walt et al,2008). The thesis investigate the applicability of theories in the context of health system reform in Iran.

Chapter 3 Literature review: A synthesis of empirical studies to identify facilitators of and barriers to implementation

Introduction

This chapter presents a synthesis of studies of implementation of health sector reform, focusing on identifying facilitators and barriers. Despite many studies having been conducted, there is little in the literature to categorize such factors and explain their role in the policy process:

‘Similar reform programmes may have very different expression in different country contexts and there is a need for detailed studies of implementation processes. At the same time, common analytical categories need to be found to facilitate some comparison across such individual case studies’ (Atkinson, 1999).

To bridge this gap, the aim was to identify factors that affect the implementation process. It not only analyses and purposefully categorizes facilitators and obstacles, but it also creates a practical framework for the empirical research in the thesis. In addition, methods for studying implementation are identified to be feed into the design of the thesis, and a dynamic model of implementation to underpin the research is proposed.

1 Developing a three stage model for structured review

Studies were included if they evaluated and investigated implementation in the health sector and identified facilitators of and/or obstacles to the implementation in any country of world. Studies were excluded if they:

- were not original research,
- could not pass quality check on the basis of Blaxter's criteria (2000) for qualitative research (Appendix VII), and
- were in languages other than English.

A three-stage model was developed to guide the review. First, Medline and Embase were searched (1999-2006) using keywords: implementation, implementing, facilitators, obstacles, barriers, obscuring, hampering, policy, health, reform, and public policy in a variety of combinations. 188 articles were found, 17 of which were excluded because of

language. 95 articles did not meet the relevance criteria after reading their abstracts. 64 papers were excluded, either because of their relevance or quality. The remaining 12 articles were included. The result of searching the Cochrane database (Chichester: John Wiley & Sons) to find any systematic review was negative.

Second, material was gathered through a manual search of key journals known to me and my advisors (Fertie, 1997). Ten key journals (*Health Policy and Planning*; *British Medical Journal*; *Health and Social Care in the Community*; *Social Science and Medicine*; *Journal of Public Health Policy*; *Journal of Health and Social Policy*; *Health care Policy*; *Health Services Management Research*; *Health Policy*; and *Journal of Health Services Research and Policy*) were hand searched from May 1999 to May 2006. Out of the 103 studies found, 21 were identified irrelevant after reading their abstracts. 15 articles were excluded on the ground of poor quality. 64 articles overlapped with the first stage findings, out of which 8 were commonly included. The remaining 3 articles were also added to the included list.

In the third stage, papers cited in the included studies were searched. By evaluating against inclusion and quality criteria, three more studies were added. After the first round of data extraction, the list of excluded and included papers was checked again, and extracted data were re-examined. Any doubt or discrepancy was solved by reference to the original papers. 18 papers were included in the main study (see Appendix VI for the specification of studies).

The assessment of quality was based on Blaxter's criteria (2000). They included: checking questions; testing general aspects; methods; analysis techniques; presentation; and ethical considerations. Altogether there were 20 questions in the criteria, some of which were divided into 1-3 sub-questions. All papers were assessed by me and by another researcher. The final evaluation of the quality of each paper was considered as the mean of the two assessments. Papers were included in the review if the overall opinion of evaluators showed that 15 or more questions were met. Details of this assessment process can be found in Appendix VII. Critics may argue that the approach is too subjective. However, the selected studies used different theoretical and methodological approaches and presented findings which contradicted as well as supported each other.

Studies were synthesized using narrative synthesis. The effectiveness of single strategies and different combinations of strategies were realized in the analysis.

2 Design and methods of studies

Qualitative methods were used in the majority of papers; mostly individual interviews and some group interviews (focus groups) for data collection. Quantitative methods such as surveys and secondary data analysis were used in six and seven studies respectively. One study was a randomised controlled trial (Kinsman et al;1999). Another used small scale ethnography to understand some cultural issues.

Samples in many studies were not intended to be representative, but attempted to maximize the variation of participants and give a balance of views by sampling participants from an interested group and from a non-interested one. Plaza et al (2001) was one of the few studies which used both quantitative and qualitative methods.

Studies were based in many countries including South Africa, New Zealand, Colombia, Bangladesh, Canada, Russia, Zambia, India, Uganda, and UK. Most studies investigated both facilitators and obstacles, with a greater emphasis on obstacles. The review had no geographical inclusion criteria, but included articles covered a diverse socioeconomic and cultural group of countries that were different from Iran. Therefore, applicability of findings here must be tested in the Iranian context. Given the general lack of such literature in Iran and the purpose of this Chapter, such diversity can be considered as a benefit. Moreover, identified categories of facilitators and obstacles were tailored in the data collection based on the Iranian background. The feasibility study (Chapter 5) and reflexive data collection were main techniques to do so.

In general, three interrelated factors influenced implementation of change in the health sector: the means by which the policy was introduced to the workforce; the use of the policy model by service providers; and the broader service context. Facilitators of and obstacles to implementation varied in accordance with many factors including: nature of implementation; cultural, educational, and socio- economic situation; level of implementers' involvement; financial concerns; effects on interests of involved groups; degree of required changes; governmental structure; and degree of decentralization. Facilitators and obstacles are categorized in the following sections. Some of the subgroups overlap and could be accommodated under a different heading.

3 Facilitators

Facilitators of implementation are categorized into four main groups: good communication; universal agreement; proper logistics; and supportive political context.

3.1 Good communication

3.1.1 Mass Media

In attempts to implement the AIDS policy in South Africa (Schneider & Stein, 2001), a number of NGOs also offered models of prevention programmes that set a standard for the government. One example was Soul City, a multimedia “edutainment” strategy which penetrated the most rural parts of South Africa, and it consistently outstripped other soap operas in viewership and listenership, and won numerous awards.

3.1.2 Auditing performance

Gill & Ahmed (2004) and Danishevski et al (2006) highlight how effective monitoring the performance of implementers was to ensure right implementation of policies.

3.1.3 Feedback exchange

Atkinson (1999) explains using suggestion boxes as a channel for the expression of a population's viewpoint; however its impact is limited as a result of illiteracy. There are also channels such as health committees for passing information from the health centre to the community with potential for two- way dialogue.

3.2 Universal agreement

The majority of actors' agreement on overall nature of the reform and consensus on the policy is one of the most influential factors to facilitate implementation. Such an ideal situation like in Lusaka, Zambia (Atkinson, 1999), where the rationale for and experiences of decentralized management are shared by all, rarely happens in implementation. In another study in New Zealand (Devlin et al, 2001), strategies attracted little controversy mainly because they were developed and largely built on existing policies. Such a consensus was also observed by Mosquera et al (2001). Kinsman et al (1999) mention

how agreement on policy between key players such as users and providers creates trust, which in turn enhances the universal agreement itself.

3.2.1 Strong partnership between key stakeholders

Gill & Ahmed (2004) nominate the key success of implementing their subject policy in Bangladesh as sustained partnerships between the key players. Family planning in Indonesia is another example of how strong partnerships moved the implementation forward into the agenda (Shiffman,2004). In a study of health sector reform in New Zealand (Deviln et al,2001), the importance of partnership was also mentioned with much emphasis on providing an opportunity for different ethnic groups to have their share in the process of policy making and implementation.

Schneider & Stein (2001) highlight the key role of individuals and groups, both inside and outside the government to challenge and provide a critical mirror for both the government and the society in the long-term success of the AIDS policy implementation in South Africa. Successes in the Indonesian experience of implementing a controversial policy like family planning in the context of the Islamic beliefs (Shiffman,2004), was because policy makers did not circumvent religious opposition and did not push forward in spite of it from the very beginning, but rather engaged religious leaders and modified the policy in response to their concerns.

3.2.2 Dedicated individuals

Walker and Gilson (2004) mainly demonstrated barrier to the Implementation of a new policy (fee removal) in their article. One of a few exemptions of facilitators was the higher level of cooperation, efficiency and commitment among staff in the smallest, least resourced and the most over-crowded clinic in their study. The facility co-ordinator in this clinic was highly motivated, very organized, dedicated and positive in spite of extremely difficult working conditions. Gill & Ahmed (2004) and Kinsman et al (1999) also address a similar situation in different settings.

3.2.3 Implementers' sense of ownership

Shiffman (2004) quotes from an Indonesian official to indicate the necessity of portraying the role of all allies in implementation and making their position secure within the programme:

'How do we manage the orchestra? By creating a sense of ownership so they do not feel they have been directed by the conductor, but rather have played voluntarily, joined in as participants'.

Customizing the reform in an understandable manner through the providers' contribution enhances their sense of ownership. Kaner et al (2003) mention that service providers preferred to customize the current model rather than rejecting it, by multidisciplinary input to the process of reconfiguring services, particularly from those working 'at the local face':

'We've got it, why keep reinventing it, and why keep getting other models from goodness knows where?'

Moreover, Walker & Gilson (2004) report the positive effects of user fee's removal on practitioners' feeling about the reform. They highlight that 44% of the survey respondents (nurses) strongly agreed with the statement that 'implementing free care has been rewarding' for them personally and 59% indicated (as either very important or important) that they felt more 'professionally fulfilled as a result of the free care policy'.

3.2.4 Public support

Plaza et al (2001) claim that their studied reform radically transformed the Colombian health care system within a short period of time. Such a rapid big bang of a radical new reform was unique in the recent health sector reforms in the Latin America and in the history of political reforms in Colombia (Bertranou,1999). During the first five years of implementation, it survived three governments and five ministers of health with different opinions and views, therefore attracted the public support. My interpretation is that the public supports whatever benefit is given to them to enjoy benefits of such a policy, however, the problem occurs when policy tends to change something or take it away, which brings the public opposition and makes that extremely difficult for implementation.

Strong public support also facilitated implementing general practice in Russia (Rese et al,2005), and evaluating and explaining the new policy of emergency obstetric care in Bangladesh (Gill & Ahmed,2004).

Walker & Gilson (2004) indicate positive effects of fee removal on public support and community health, particularly on widening access to health services as the most successful aspects of free primary care.

3.3 Proper logistics

Preparing adequate resources and conducting a pilot study prior to the universal expansion of implementation was addressed as a facilitator of implementing change in health systems.

3.3.1 Adequate resources

Particular attention to appropriate resource allocation including human resources, equipment and finance is crucial for successful implementation. Gill & Ahmed (2004) report over-utilization of services because of either improved performance or better equipment in local communities.

3.3.2 Pilot study prior to universal expansion of the policy

Rese et al (2005), Gill & Ahmed (2004), Plaza et al (2001), and Shiffman (2004) all portray the extent to which the pilot implementation of policies before its universal expansion facilitate the main implementation by identifying influential barriers in advance.

3.4 The political background

Decentralization and good political leadership are discussed in this section.

3.4.1 Decentralization

Kaner et al (2003) mention that the majority of their respondents branded decentralization as the most important reform achievement to date. They addressed improvement in the relationship between the centre and periphery as well as the growing credibility of the

reform following decentralization, as a facilitator of implementation. Lavis et al (2001) also address the same finding in Canada, however, they caution the need to balance the desire for local autonomy in decision making against national consistency in provision, like Schneider & Stein's (2001) study on the implementation of the AIDS policy in South Africa.

3.4.2 Political management and leadership

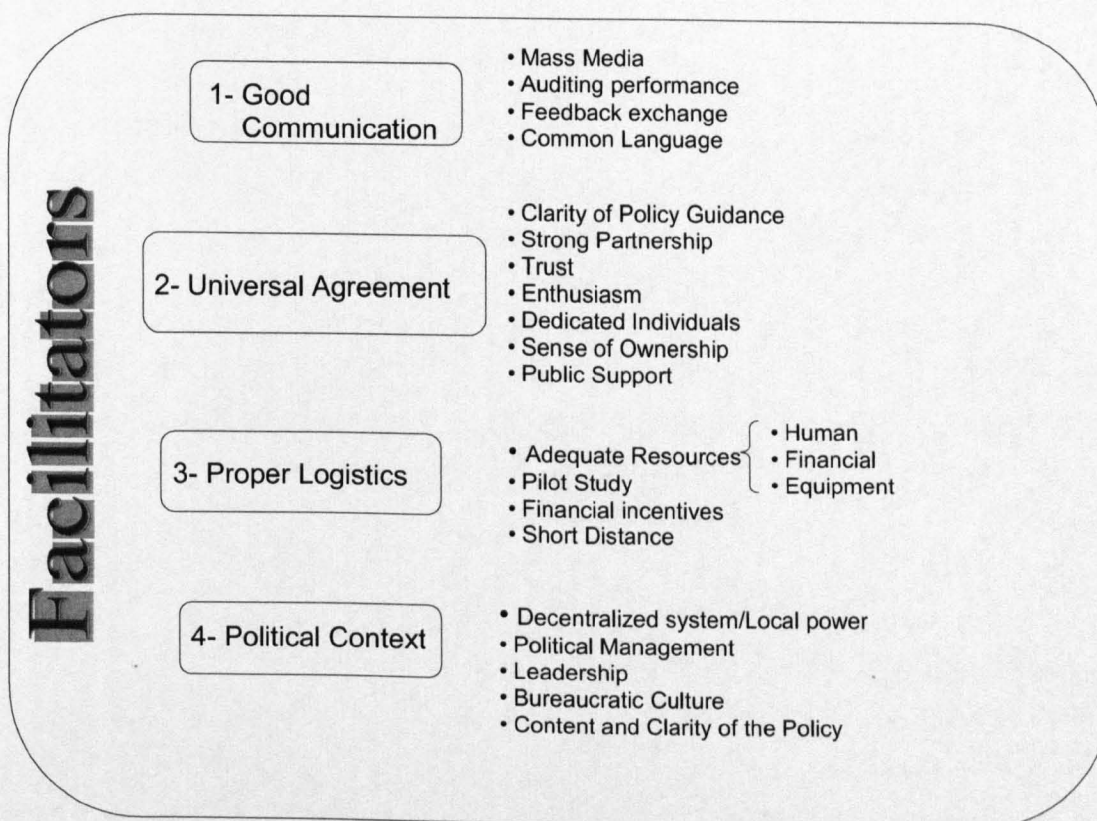
Shiffman (2004) points out impacts of political management on efficient implementation of a policy. The BKKBN (National Family Planning Coordination Board), as the public organization in Indonesia responsible for resource provision and generating implementation support, was legitimized through integration of its activities into the government structure. Even though the process was against decentralization, it was successful in that particular context. This shows the importance of contextual background as well as socio-cultural considerations in implementation. The authoritarian characteristics afforded Indonesian bureaucrats unusual power.

Adversely, some degree of centralization facilitated the implementation of a complex task like AIDS in the decentralized background of South Africa (Schneider & Stein ,2001), where the government had a central role to lead, fund, and implement a comprehensive response to AIDS. The final authority rested with a coordinating structure in the president's office at national and the Prime Ministers' offices at provincial level (NACOSA,1994). In 1994, AIDS was declared a 'Presidential Lead Project', which highlighted the special status of the AIDS programme and early access to resources set aside for reconstruction and development. Good leadership mobilized and coordinated a range of actors across a multitude of social and sectoral divides around a common vision in that programme, the type of leadership called 'management of meaning' (Smircich & Morgan,1982). Walker and Gilson (2004) also address the positive impacts of high political support on implementation. Facilitators of implementation are summarized in Table 3.1.

4 Obstacles

Interestingly, the same factors which facilitate implementing a change could hamper that in another way, depending on many contextual factors. Identified obstacles to implementation are categorized into four groups: approach to make the policy, inappropriate communication, improper logistics, and unsupportive political context.

Table 3.1 Facilitators of implementation



4.1 Inappropriate policy making

Top-down approaches to define the policy, conflict of interest, making vague policies, and lack of evidence-based policy making are described in this section.

4.1.1 A top-down approach to the policy

Many studies address barriers to implementation in relation to imposition of policies, calling for consultation with stakeholders including service providers, the public, and local policy makers to make a policy. Kaner et al (2003) report that most respondents in their study had no introduction and no opportunity to express an opinion about the reform. The flow of information was perceived to be one-way from management to service providers with minimal interaction, which ended in their anger and feeling undervalued. Developing policies outside the local area appears to generate suspicion amongst the respondents.

Whereas, customizing the policy with service providers' engagement unites them in the view that there should be multidisciplinary input into the process of reconfiguring services, particularly from those working at the coal face (obid).

Even in a decentralized context such as Canada, it was crucial to understand who makes the policy (Watt et al,2005). The question is who should make the decision and on what basis (Harrison et al,2000). Walker and Gilson (2004) explain how broadly isolated the overwhelming majority of participants felt by imposing a policy on them with no priori advocacy. They considered themselves excluded from the policy process, feeling their experience and expertise were overlooked. Mosquera et al (2001) explain that it ended up with lack of trust and participation, which in general led to a sense of disregard for the policy.

4.1.2 Conflict of interests

Many policies create conflict in the interests of stakeholders, bureaucrats, the public and media; lack of advocacy and imposing policies could flare the conflict up. Lavis et al (2001) report severe reactions to the information which was against the interest of stakeholders that supported the status quo. Gill & Ahmed (2004) address being unwelcome to the parallel health systems of the Directorate of Health Services and the Directorate of Family Planning in Bangladesh, which posed particular challenges in building up a viable referral system.

Schneider & Stein (2001) point out the conflict of views between the minister of health in South Africa, who created controversy by unexpectedly announcing at a large conference that AIDS was to be made notifiable, and the medical research council along with other institutions which were strongly opposed to notification. Bergen & While (2005) also introduced conflicts with professional values.

4.1.3 Vague policies

Some studied policies are vulnerable to individuals' interpretation because of the lack of clarification which leads to rigidity in practice and quality of services. Kaner et al (2003) argue that ambiguity in tier definitions of implementing mental health policy in the UK ended in that practitioners interpret cases in ways which are beneficial to themselves or their agency, rather than in the best interests of users. Danishevski et al (2006) also report

that service providers felt they were already working at full capacity, therefore unable to accept further additions to their case loads. Harrison et al (2000) demonstrate their respondents' own interpretation about crowded hospitals and overworked nurses, which made them decide they could not afford proper implementation. In addition, a controversial study subject such as abortion made implementation more vulnerable to individuals' interpretation. Abortion in the case of rape or incest and saving women's lives received significantly more support than abortion on request or abortion for women in poor social or economic circumstances.

4.1.4 Lack of evidence-based policy

Watt et al (2005) explain how implementing a change in the length of stay at hospitals in the Ontario province of Canada was about to fail because of no evidence suggesting a longer length of stay is universally beneficial. Practitioners deliberately did not even tell women about the policy and actively discouraged extended stays based on accepted standards of their practice. Walker & Gilson (2004) mention how a valid theory of cause and effect underlay the policy, and the removal of fees anticipatory promoted increased utilization.

4.2 Poor communication

Improper communication and lack of trust among stakeholders are mentioned here.

4.2.1 Improper communication

Indirect communication between involved agencies creates a serious barrier to implementation. Kaner et al (2003) highlight widening distance between service providers due to the habitual use of paper communication. Furthermore, some respondents reported that information was not shared equally across different professional groups or that it was sometimes actively withheld, which lowered their lack of ownership.

Plaza et al (2001) identify lack of communication and training in their study on expansion of insurance in Colombia; this resulted in many of the poor, who were to benefit from the expansion, not knowing how the system is supposed to work nor their own rights. Some people even applied for multiple insurance cards, assuming that if one is good, two must

be better. Atkinson (1999) also branded poor communication within the clinics and between professionals and health authorities as the key barrier.

4.2.2 Lack of trust

In hope to improve efficiency in the New Zealand health sector, a policy was defined, but was never implemented (Delvin et al,2001). Disappointing outcomes of that policy provided a sharp contrast with the overoptimistic expectations of its proponents.

4.3 Inadequate preparation

Lack of proper logistics, inappropriate financial incentives, and insufficient training are the three categories of barriers in this section.

4.3.1 Improper logistics

There are many reasons for lack of appropriate logistics in implementation. Kaner et al (2003) address an ambiguous policy which does not verify needed materials as well as practitioners' feeling of being over- stretched, that ends in excessive referral of users while resources are insufficient. Rese et al (2005) report that directors of GP training centres identified the need to improve the vague federal regulatory framework. Plaza et al (2001) explain how considerable logistics shortages at the beginning of the implementation resulted in frequent abuse by the insurance companies which enrolled people without issuing insurance cards, thereby receiving premiums without providing services. Kinsman et al (1999) also mention time constraint as a common barrier.

Many studies reported numerous human resource, financial, and logistic barriers to implementation. Harrison et al (2000) argue that although reproductive health services were being overall reformed in KwaZulu/Natal province in South Africa, but women were still perceiving a need for more extensive services and better quality of care (Fonn et al,1998). Despite the policy emphasis on abortion, health care providers at most hospitals and clinics refused to provide abortion, or to be trained to do so, hindering implementation of the Act (ICSP,1998), which left a population of over two million women of reproductive age without adequate access to abortion services. Gill & Ahmed (2004) also identify logistics insufficiency as the major constraints to implementation of obstetric emergency care in rural Bangladesh, where trained health personnel are concentrated in urban areas

for financial, security and family concerns. Mosquera et al (2001) and Sinha et al (2006) also portray impacts of lack of basic equipment (office equipment, supplies, telephones, and transport) on implementation in other settings.

4.3.2 Lack of financial incentives

Rese et al (2005) report that many respondents in their study on implementing GP practice in Russia commented about the large discrepancy between the GPs' average monthly income in state and private primary care facilities (2091 roubles v 13820 roubles), which ended in a very tough monetary condition for newly trained GPs. Insufficient funds was also the reason for improper logistics.

Introducing free care or fee removal is another incentive which causes over-utilization of services from one side, and probable public satisfaction from another. Walker & Gilson (2004) state that 85% of their respondents (nurses) complained about their substantial workload rise because of the new policy (free care), which caused serious compromise in key elements of their professional practice. Over-utilization of services which inevitably reduced drug supply, deteriorated nurses' relationship with their patients as well as having a direct negative effects on personality and behaviour of the majority of nurses. Many nurses resigned from the clinics and moved into the private sector or abroad, perceiving that while patients benefited from new policies, their status deteriorated at the same time.

4.3.3 Training insufficiency

Schneider & Stein (2001) describe recruitment of new personnel with little knowledge of large bureaucracies, while they were left abandoned to make innovation in the policy. In a period where AIDS was a rapidly expanding but still a largely invisible problem, national and provincial governments naturally focused on other immediate priorities because of lack of knowledge and training to identify and tackle challenges, similar to Danishevski et al (2006) in the Russian context.

4.4 Lack of political support

Cultural and traditional values, information, institution, and inadequate political will are four groups of obstacles to be discussed in this section.

4.4.1 Cultural, traditional, and religious concerns

Harrison et al (2000) point out a few religious and cultural concerns which influence the implementation of a new policy (termination of pregnancy) in South Africa. Many nurses in their study felt they would be killing another human being if they participated in providing abortions, arguing that the hospital was established to save people's lives not to remove them. Beyond opposition to abortion itself, in South Africa as in other settings, legalization alone cannot halt unsafe abortion, as access often remains a problem due to ignorance to the law among women and medical staff, judgmental attitudes toward women seeking abortion, and complicated procedures to obtain an abortion (Bennett, 1999). In addition to practitioners' concerns, the study also reported users' conflicts over the new policy at many levels, arguing that the new law would encourage young women to be irresponsible for their sexual behaviour. Nevertheless, in certain specific circumstances, particularly rape and incest, both nurses and users agreed. This distinction says much about the community norms.

Gill & Ahmed (2004) identify socio- cultural barriers to implementation including women's lack of decision making power within their households as well as poverty.

Shiffman (2004) discusses a very typical example of religious conflict before implementing family planning in Indonesia. Most family planning programmes in countries with predominantly Islamic population have faced difficulties in promoting the use of contraceptives. One reason is the clerics' orientation, many of whom view family planning as the replacement of the will of God with that of individuals in regard to reproduction. Kumar & Gantley (1999) highlight some ethical considerations and traditional barriers.

4.4.2 Informational barriers

Lavis et al (2001) convey some of their respondents' feelings concerning the availability of the wrong type of data for them. A few people were concerned that the information was not getting to the right people in the right way. One participant highlighted the importance of approaching this information differently. Idea- related barriers were cited more than twice as often in this study, probably because of conflicts between the policy implications of information and current organization philosophies, priorities, or strategies (value- related barriers).

Plaza et al (2001) address the non coordinated flow of information, meaning that on one hand, there was a proliferation of unneeded and duplicated information, and on the other hand, those who needed information to make decisions often did not have access to it, particularly at the central level. Mosquera et al (2001) also highlight information imbalance, while Sinha et al (2006) mention lack of information as a barrier. Watt et al (2005) notice the same group of problems in the context of a high income country: Canada.

4.4.3 Institutional and organizational barriers

Rese et al (2005) argue that despite a major investment in training GPs in Russia to become family doctors, trainees faced major barriers in applying what they had learned because of opposition from senior doctors, unreformed financing structures, and scarcity of equipment. Administrative staff, specialists in polyclinics and hospital physicians who saw their professional dominance being undermined, also opposed the policy.

Lavis et al (2001) list a group of barriers related to who would win and who would lose (interest-related barriers) while the policy is implemented as well as those related to how decisions are made (institution-related barriers). In addition, they criticized the existing government partnerships for lack of accountability to address issues which cross a departmental or governmental boundary. Providing yet another perspective, a federal health policy maker branded the trade agreements between Canada and other countries as a barrier to interventions related to the policy.

Schneider & Stein (2001) explain how difficult defining responsibilities and coordinating actions were between spheres of government in the context of quasi-federalism and evolving decentralization to implement the AIDS policy in South Africa. Roles, responsibilities, and relationships might be clear on paper, but they are complex in practice. Despite the achievements of that presidential led project, some evidence suggest that initiatives at the presidential level have not necessarily been successful, which could indicate the lack of an overarching social development framework within the government (Marais, 1997).

Plaza et al (2001) point out difficulties in coordinating and organizing health sector reform at the national level in Colombia, while institutions at the local level had limited understanding of the overall scope of the reform and how crucial their role was in the process. Conflicting messages were also common in that reform. Additionally, Mosquera

et al (2001) identify the lack of integration within the system and deficiency of knowledge concerning the responsibilities and roles of each institution which confronted both flow of resources and information channels.

Watt et al (2005) brand organizational context as the major barrier to extension of hospital stay in Canada. Ironically, the length of stay at hospitals was being extended simultaneously with downsizing of hospitals. They had anticipated a high rate of acceptance of the offer and were convinced that resources were not available to implement the policy.

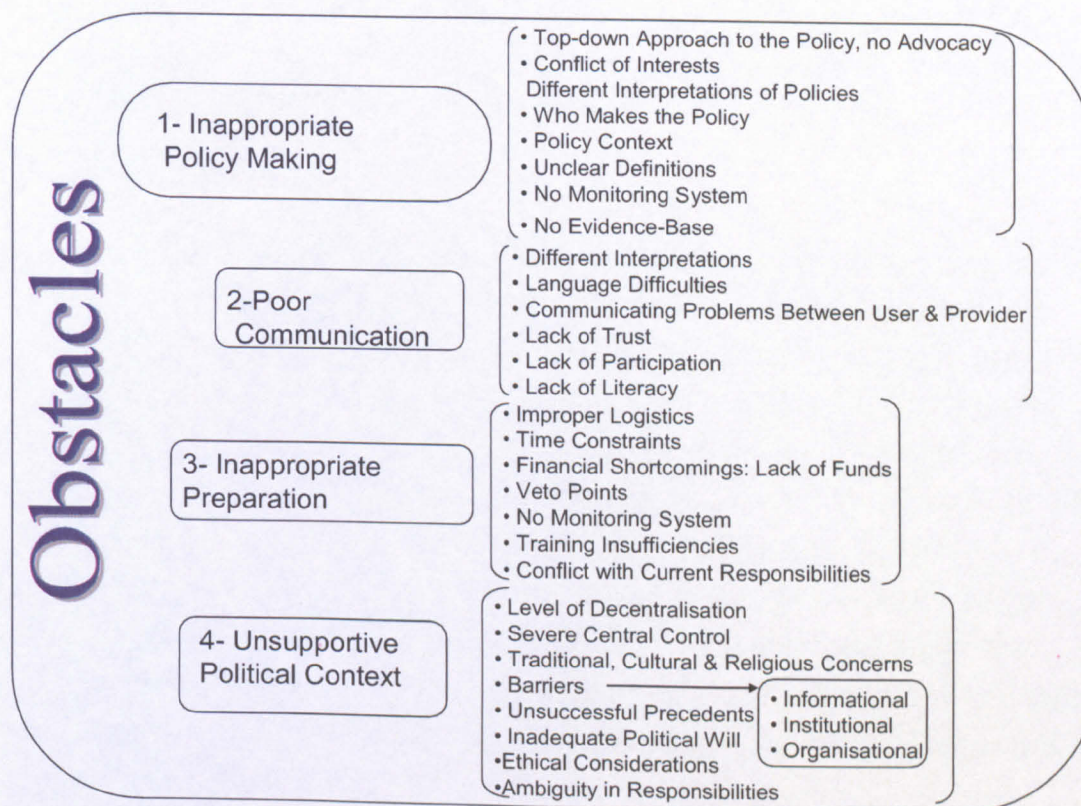
4.4.4 Inadequate political will

Schneider & Stein (2001) mention inadequate political willingness as the reason for lack of progress in implementing the AIDS policy in post-apartheid South Africa. The study exemplifies the difficulties of implementing an ambitious programme through a weak and inherited administration undergoing restructuring at every level. It also categorizes the inadequacy of political commitment as an explanatory variable, highlighting the role of leadership to mobilize and coordinate a broad and multi-sectional response to a complex policy such as AIDS.

Atkinson (1999) argues that sitting at a critical veto point position highlights how policy implementation may be blocked or transformed during implementation. She mentions three groups of veto points. First, the Minister of Health who retains an immense amount of power in the health system and his reformulation of health bill has radically altered its nature. This happened in spite of opposition from the powerful donor community which significantly drove and funded the reform process. Second, decentralization itself may have created a new or stronger veto point by giving more power to the district managers over their own financial resources. Finally, the concept of citizen participation, which is very strong in the policy document, is weakened at each level in the system. Health workers' refusal to provide abortion services in Harrison et al (2000) confers power as veto points on them, in the sense that they can deny services to women seeking care. This refusal also has seized the moral high ground in a dialogue where the voices of women seeking access to care have not always been heard.

Identified obstacles to implementation are summarized in Table 3.2.

Table 3.2 Obstacles to implementation



5 Discussion

Implementation has a dynamic nature. The same factors can either facilitate or obstruct the implementation depending on the context. When more facilitators exist, the predicted gap between the policy and the outcome is narrower, and vice versa when obstacles are dominant. The facilitators and barriers in this model are based on the findings of this synthesis, and therefore are conditional on further studies. The model and the concept behind it seem to work in any implementation experience.

This review provided evidence that studying implementation is a two-way process, where all components of the implementation cycle affect its process. The synthesis also clarified that intended policies are subject to change, modification, reshaping, and even withdrawal during the implementation process. Factors which act as facilitators of and obstacles to implementation function as a double-edged sword. The factor which facilitates the implementation of policy X, can hamper implementing of policy Y, and vice versa. Context

determines whether a factor is a facilitator or obstacle. For instance, even though decentralization facilitated the implementation of policies in some settings (Harrison et al,2000; Lavis et al,2001; Gill & Ahmed,2004; Watt et al,2005), a strong centralized system pushed a controversial policy like family planning to the top of the agenda and significantly contributed to its successful implementation in another political environment (Shiffman,2004).

Conflict of interests of different stakeholders could blunt the implementations process, but could be tackled through greater cooperation (Lavis et al,2001). However, such an approach might accentuate the gap between those who readily change and those who are more resistant to change, ending in an increased variation in care for service users (Firth-Cozen,1997). Involving individuals and organizations ensures that they are not lost in the process and improves their cooperation (Nutbeam,1997). Potential winners and losers with political influence must never be absent during policy development (O'Neil & Pederson, 1992). It is necessary to understand the perspectives of all stakeholders in the system before attempting to implement changes in practice (Grol,1997). Particularly, public support is key to the success in any implementation (Plaza et al,2001) and relies on proper communication. Developing policies outside the local area appears to generate suspicion amongst the respondents:

'Successful implementation of new models for service delivery and organization is unlikely if those responsible for delivering care are not part of the process of change' (Fitzgerald et al,2003).

Local and national stakeholders' support and their universal agreement on reform significantly facilitates the implementation. This approach is congruent with the tenets of complexity theory, which encourages a shift in thinking about health care organizations from mechanistic black boxes, in which rational technical fixes produce predictable outcomes, to complex adaptive systems with dynamic and unpredictable properties founded on relationships between different stakeholder groups (Sweeney & Mannion,2002).

Different interpretations by providers must also be taken into account. They interpret and adapt policy changes initiated at higher levels in ways that not only shape the policy, but may also lead to unexpected outcomes. Policy success may, in effect, have been limited by the manner in which providers exercise their discretion in implementation.

Mass media is one of the most influential tools (Schneider & Stein,2001), overlooking its role hampers implementation.

Employing managerial tools like check lists to audit implementation on the basis of specified criteria linked to the policy goals, and auditing practitioners' performance as well as relating their earning partly to their performance, by conducting independent and unbiased audits could provide effective feedbacks to put evidence-based inputs into the implementation cycle (Gill & Ahmed,2004; Danishevski et al,2006).

Communication between different stakeholders has undeniable impact on implementation. Atkinson (1999) reports how effective communication with patients opened channels for population viewpoints to reshape the policy. In addition, it enhances partnership between different stakeholders (Gill & Ahmed,2004) and worsens providers' cooperation (Atkinson,1999; Shiffman,2004). On the other hand, poor communication, such as excluding stakeholders from the process of policy making (Harrison et al,2000; Walker & Gilson,2004), ends in contradictory interpretations of policy which blunts implementation.

Logistics has a vital role in any implementation. Even though dedicated individuals and ambitious service providers can compensate many shortages (Gill & Ahmed,2004; Kinsman et al,1999), most studies suggested that proper logistics(including human, financial, and equipment) facilitates implementation and vice versa (Gill & Ahmed,2004; Rese et al,2005; Walker & Gilson,2004). Inappropriate logistics widens the gap between the intended policy and the actual outcome. However, proper preparation before implementation does not guarantee its success, because of the dynamic nature of implementation.

Even though reducing user fees enhanced utilization of services in some studies (Gill & Ahmed,2004; Walker & Gilson,2004), it may also cause a moral hazard that results in over-utilisation if not carefully introduced (Takian & Kabir,2007).

The political environment is a fundamental factor in facilitating or obstructing the implementation. Political leadership has a major impact. Supportive leadership is a key to success (Schneider & Stein,2001; Shiffman,2004), whereas inadequate political will endangers the process (Schneider & Stein,2001). Determined political support is strong enough to facilitate or hamper implementation even when others are pushing it adversely (Shiffman,2004).

Traditional, cultural, and religious values are important variables and must be respected even in secular societies, otherwise implementation may fail (Harrison et al,2000; Gill & Ahmed,2004; Shiffman,2004; Kumar & Gantley,1999).

6 Conclusions

This review has revealed a dynamic model of implementation which connects different factors that influence the implementation of a public policy. It has contributed to my understanding of implementation and the impact of various factors. It also clarifies the double function of some factors and the variety of variables which convert such factors to either a facilitator or an obstacle. Moreover, it reveals the mechanisms by which different factors take various roles to perform as facilitators or obstacles, as well as factors which determine such a process. Exceptions may apply to a few factors which specifically affect the implementation of some policies in particular settings, which are important to consider during the data collection phase of the thesis. Given the lack of qualitative research in the health system on Iran, this synthesis provides evidence of the applicability of qualitative methods to address the objectives of this thesis.

The findings contributed to the methodology for the empirical research that follows. The value of qualitative methods to investigate facilitators and obstacles became apparent. I also saw practical examples on sampling methods, which assisted the sampling process of the thesis. Furthermore, It provided eight practical lessons, which are presented below.

First, the health policy makers' position is very important in implementation. They act as the intellectual leaders within government, and sometimes outside of it, to help frame the policy in the language of other stakeholders' values. Programmes for clarifying policies and gaining an understanding of health workers' concerns regarding the intended policy are also very important. Such programmes could be workshops designed to develop a framework for assisting health workers to relate their values and beliefs to the needs of their clients. Health workers' resistance is a powerful impediment to access to care. In the balance between people who need services and health care workers who provide those, users will continue to lose until this debate is resolved. The above mentioned programmes might facilitate removing this challenge.

Second, political issues, particularly in decentralized systems, have an effect at several levels. There is a need for supportive legal and regulatory frameworks at the central level

to allow regional authorities to develop locally applicable policies. An explicit human resources strategy should tackle staff motivation and retention. Incentives must be aligned with the goals of the reform and be system-wide, taking account of those working in different hierarchies such as primary and secondary care. Also, resources are needed to support change. For models that are moving from a system based on cheap, poor quality labour to one with fewer skilled people supported by modern technology, it is bound to be painful, eliciting opposition from those with most to lose. The process of change will inevitably require targeted investment and technical support.

Third, policy makers should argue for institutional innovations within governments which will ensure that intended policies are not left out of decision-making processes. The success of efforts to build a policy also appears to depend on how decisions are made. In particular, success depends on institutional features like the extent of fragmentation of jurisdictional authority between departments and levels of government, the pattern of existing government partnerships, and the extent of accountability for addressing cross-departmental and cross-governmental issues. To overcome this barrier, steps need to be taken to establish cross-departmental or cross-governmental accountability for health. Again, action here depends in part on overcoming idea-related barriers. Consistency in this relationship is also important. If the government bureaucracy is a weak player, it should also be feasible for credible political leaders to harness the considerable energies available outside of the formal government.

Fourth, policy implementation in any health care system also relies upon providers' commitment. Therefore, those responsible for delivering care need to be part of the process of change. Commitment to routine measurements and publication of key indicators of performance in implementation greatly improve the ability of politicians to justify and be held accountable for structural change and help the public to engage in informed debate. A template for such assessments could include indicators of the technical efficiency of providers, transaction costs as a proportion of total spending, horizontal equity (the extent to which those with similar needs receive similar services), reduction in the level of ill health and of health inequality attributable to health services, and users' experience of services (Devlin et al, 2001), or whatever criteria are endorsed as objectives of the implementation. Monitoring and evaluation sometimes identify a much more conflicting type of process. Conflict, however, does not need to be unproductive and delivers the possibility for progress by highlighting the gap between what is and what should be.

Fifth, particular attention must be paid to help actors at all levels who develop the institutional capacity to successfully carry out their intended functions. Clearly articulated ground rules at all institutional levels must also be readily available to convert theory into practice. Information about how the system functions and particularly the users' rights must be widely disseminated. The manner in which information is conveyed must be accessible for the users of the system to improve their demand capacity, which in turn will allow competitive forces to work.

Sixth, establishing a solid institutional capacity is vital to effectively implement reform. Proper managerial instruments to function within a competitive market are also essential. Reform proposals should be accompanied by clearly stated and measurable objectives against which the new system's performance is monitored and scrutinised. Proposals for change should be accompanied by estimates of the transitional and ongoing costs. Policy analysis plays a role in this process by helping the various actors to understand their environments, and to recognize themselves to be better strategic or political actors (Walt & Gilson, 1994).

Seventh, policy statements, no matter how convincing, cannot change health care practice on their own. Inhibiting factors must be addressed if policy is to be used as a tool to change practice. Policy makers need to carefully consider not only the intent and objectives of a policy and the evidence for and against alternative approaches, but also the contextual barriers faced by implementers. Importance of tailoring policy for local circumstances is clearly emphasized in the literature on modern implementation.

And finally, it is also important to know that some radical reforms are at a certain brief political moment in time. Delaying implementation until all the necessary tools are ready would probably destroy the whole project. The choice sometimes is not between doing it correctly or doing it wrongly, it is between doing it hastily or not doing it at all (Takian, 2008).

Chapter 4: A description of family medicine in Iran

Introduction

In order to appreciate family medicine (FM) and the facilitators of and obstacles to its implementation, it is necessary to be familiar with the development of the policy. This chapter describes the history of primary care in Iran and the need for its reform; development of FM policy; preparatory measures to implement it; principles of implementing FM; reasons for its concurrent implementation with Behbar; and preliminary outcomes of implementation. The content of this chapter is based on a number of documents, including the policy, the operational instructions for implementation (several versions), reports by the Ministry of Health, Ministry of Welfare and other organizations, parliamentary bills and negotiation minutes, along with my observations and field notes.

1 History of primary health care (PHC) in Iran

Nationwide implementation of PHC networks started in 1981 in Iran with parliamentary approval (see Chapter 1 for more details). It was designed for both rural and urban areas, but in practice remained comprehensive in villages and loose in cities. As a result, dramatic improvements were obtained in health indices over the following 25 years. Some of the most important ones are presented below:

1. General life expectancy rose from 46.7 to 71 (WHO,2006);
2. Reduction in maternal mortality rate from 140 to 27 in 100,000 life birth ;
3. Decreased population growth from 3.9% to 1.2%;
4. Decreased under-five deaths caused by diarrhoea and respiratory infection from 5 & 7.8 in 1000 rural children in 1993, to 0.8 & 2.9 respectively in 2002;
5. Increased vaccination coverage for all recommended vaccines from 40% to 95%;
6. Measles eradication in children between 6 months and 5 years in 1994, its incidence was 34 in 100,000 in 1977;
7. Increase in doctors per capita from 4.7 per 10,000 population in 1981 to 11.1 in 2001;
8. Increases in hospital beds, medical imaging equipment, and laboratory services from 153, 175, and 3.3 per 10,000 population in 1981, to 169, 278, & 5.7 respectively in 2003 (CFD,2004).

The PHC network in Iran had a significant role in achieving better health over the last three decades, particularly in villages. This thesis revealed a number of such features which also facilitated the implementation of FM in rural areas (see Chapter 7 for further details).

Despite all these improvements, the increased life span of the population; changes in disease pattern towards long-term conditions and non communicable diseases; mass migration to cities; natural disasters; introduction of a market prominent economy; privatization and innovations in medical technology have created new challenges for the health system. The way that services were delivered did not address the changing needs (HERIMP,2004). In order to respond to these conditions, a series of reforms was planned in the health system.

The 4th plan for development of Iran disclosed explicit emphasis on social support. For instance, health dominant insurance, reducing out of pocket expenditure, and equitable distribution of user fees were clearly endorsed in the plan. The plan, which was designed for five years by The Expediency Council (Majmaee Tashkhise Maslehate Nezam in Farsi), and was affirmed by the leader, is constitutionally the most important source of policy making in the country; none of bills and plans must contradict it. In summary, the 4th plan emphasized the role of the government to (DOC,2005):

1. Expand health to the entire population;
2. Promote public health and reduce risk of diseases and other public challenges;
3. Create logical and equitable public accessibility to health services by rationing;
4. Reduce out of pocket expenditure from 55% (even though many stakeholders believed it is currently at 70%) to 30% at most, along with reduction of catastrophic expenditure from 3% to 1%.
5. Implement health insurance on the basis of family medicine and referral;
6. Provide basic insurance for treatment for the entire population by 2009 (Vaezmahdavi & Rafiefar,2005).

In addition, parliament, particularly its commission on health (COH), in cooperation with the Management and Planning Organization (MPO) revised the annual budget bill for 2005, instructing the Medical Insurance Organization (MIO) to issue insurance log-books to all residents in rural areas and cities of less than 20,000 population, which entitled them to family medicine (FM) services and a referral system (NUHSR,2005 b).

2 Preparation for the reform

In 2002, a small team of stakeholders in the health sector including the MOH, the social security organization (SSO), the MPO and the COH, was formed to undertake a comprehensive study of primary care systems, particularly in Canada and the UK (NUHSR,2005a). An executive team was also established for health sector reform, aiming at training staff and policy makers. Together with insurance organizations, four provinces were identified to pilot implementation of FM. Even though the MOH, insurance organizations, and the MPO had consistently agreed to undertake the task, pilot studies were abandoned for many reasons, mainly the separation of insurance organizations from the MOH in early 2004.

Nevertheless, two things changed the reform pathway: the government's decision to reconstruct the health system in Bam (the southern city which was almost completely destroyed by an earthquake in late 2003 with 45,000 casualties) on the basis of referral, and parliamentary legislation to fund rural insurance for all (Behbar) by issuing insurance log-books to all residents in rural places. In the former, the FM pilot focused on rationing and GP gate-keeping. Soon after, in March 2005, parliament shifted the entire funds for villagers' treatment to the MIO, which was one step forward in integrating the pooling system.

Although the MOH had initially planned to start the implementation from urban areas in the four selected provinces, parliamentary budget approval was the MOH's opportunity to cooperate with the MIO (under supervision of the recent established Ministry of Welfare and Social Security: MWSS) to implement FM in rural places. Instead of pilot in cities, they agreed to implement FM universally on the basis of referral, alongside Behbar, in rural areas and small cities. The aims of the reform were reengineering the funding mechanisms and payment methods, reducing unnecessary costs, providing basic services to all, making out of pocket equitable, raising responsibility, establishing a proper system for auditing performance, and improving public satisfaction. Implementation of FM started nationwide in August 2005, concurrently with Behbar in rural areas and cities of less than 20,000 in population.

2.1 Principles of implementing FM

Three scenarios were short listed for implementation (PEHP,2007):

- Making contracts with private doctors to work alongside PHC doctors.
- Making separate contracts with existing public doctors to deliver services on the basis of MIO needs.
- Integrating the current resources to create a virtual pool for common use in the implementation.

Six pillars were considered as the main principles for implementing FM along with insurance coverage for rural areas, the tribal population (almost 3 million in country), and residents in cities with less than 20,000 inhabitants:

1. The PHC network was identified as the only appropriate and available medium to deliver health services. Rural health centres were defined as the base for doctors, midwives, nurse, lab staff, etc.
2. A health services package was defined to enable managers to assess quality, quantity, and efficiency of services.
3. It was decided to assign one health team for every 2000-4000 population. Therefore, rural residents needed no change in their registered health houses.
4. To fulfil patients' expectations, the referral pathway in rural places varied on the basis of regional specifications, accessibility to specialist services, possibility for information management and transport facilities.
5. The most essential factor to audit FM was defined as users' satisfaction.
6. Payment mechanisms and audits were branded the two most important cornerstones for success of the implementation.

The family doctor (FD) is responsible for coordinating and managing health team activities (both preventive and curative) in his/her served area. S/he is in charge of recording patients' medical data within the health folders, which were uniformly distributed across the health centres.

2.2 Aims of FM

Aims of FM were as follows (NUHSR,2005a):

1. Establishment of a referral system;
2. Increasing health system responsibilities;

3. Raising public access to health services;
4. Reducing non-essential expenditure;
5. Enhancing coverage;
6. Health promotion;
7. Equalizing health status in the society;
8. Rationing services;
9. Employment of relevant graduates, particularly GPs and midwives.

3 Development of FM

To implement FM, seven steps were undertaken by the MOH. This section (3) has been extracted mostly from NUHSR2005a &b; and NPEHP,2007):

3.1 Studying phase (2002-2005)

1. Studying similar experiences in other countries.
2. Undertaking feasibility studies in the four selected provinces: Eastern Azerbaijan (northwest), Khorasan-e-Razavi (northeast), Chaharmahal-va- Bakhtiari (west), and Bushehr (south), as well as the city of Bam (south).
3. Capacity building for personnel through national and international training courses.
4. Producing scientific documents and operational instructions including: 'the Book for Health Sector Reform' (green books) in five volumes, instruction for referral system and FM, etc.
5. Preparation and publishing health services package and clinical guidelines for 10 most frequent diseases in primary care.
6. Incomplete pilot of FM and referral system in Bam.

3.2 Preparation phase (2005-2006)

1. Establishment and equipment of a national administration for Behbar across medical universities and health districts.
2. Establishment of committees in technical, educational and public relations in the national administration for Behbar, as well as universities and health districts.
3. Collection and finalization of executive instruction for implementation.
4. Advocating chancellors of medical universities and provincial MIO.

5. Running a website for Behbar: www.behbar.takfab.ir, in order to facilitate multi-lateral communication between involved individuals and organizations (the website has not been updated since six month after the start of implementation).
6. Determination of a provincial and district deprivation index.
7. Renovation and reconstruction in almost 1000 rural health centres, and purchasing 1080 vehicles for most health centres with the World Bank loan (PIU).

3.3 Contract phase (2005-present)

1. District health centres made contracts with provincial MIOs.
2. Determination of methods for delivering pharmacy, laboratory, and radiology services in rural health centres.
3. Making contracts with doctors and midwives.

3.4 Settlement phase (2005-present)

Doctors and midwives, who joined health teams, settled in almost 2300 rural health centres nationwide. The recruitment was still continuing in 2008, until all positions are filled. People were encouraged to register for Behbar insurance log-books. All people who resided in the geographic area were entitled to register, even those with other insurance schemes. They had neither a choice of doctor or health centre; both were allocated according to where they lived. Village councils, Behvarzes, and other volunteers facilitated administrative activities. There was a premium fee of 2800TM (£1.50) per log-book. In the beginning of this phase, in order to encourage people to register for Behbar, the premium fee was set at 1000 and 700TM, and was even free for a while. It was claimed that 8-15% of the public who registered for Behbar, were already covered by another insurance scheme. There were also a significant number of people who lived in cities most of the year but had record homes in villages and who registered for Behbar. By the end of 2007, just over 25million people were registered with Behbar, though 10% had not yet been issued with their log-book and thus were not entitled to utilize services at the Behbar tariff.

3.5 Training phase

Family doctors were GPs with no specific training in FM. A few courses (induction workshops for newcomer GPs, distance learning courses, and courses to become a specialist in FM) were planned for them, but none were held.

3.6 Auditing phase

Volume three of the green books was about auditing practitioners' performance, according to which, family doctors, midwives and other members of the health team had to be audited at least every three months. 30% of practitioners' income was linked to their performance results. There were some checklists in the book as guidelines for auditing. The book said nothing about the qualification of auditors. The Golestan University (the province which I studied) adopted a checklist, so-called 'The Pyramid of Auditing' to also audit the administrative staff, either in the DOH or in local authorities and health centres.

3.7 Revision phase

The policy and operational instructions have been continuously revised to respond to peripheral needs and improve implementation. By 2008, instruction had undergone five major revisions, so-called versions. At the beginning of every Persian new year (20th March), a common annual agreement was expected to be signed by the two ministers (MOH & MWSS) to address principles of cooperation and to clarify probable challenges.

4 Principles of concurrent implementation

It is necessary to clarify the specifications of FM and Behbar and define features of the referral system as regards definitions, cooperation, style of implementation, and payment.

4.1 Definitions

4.1.1 Family medicine (FM)

Family medicine is a model of primary care, in which a family doctor (FD) or a behvarz are the first level of public contact. Behvarzes are local practitioners with two years training to deliver basic services, who are based in health houses in rural areas (see Chapter 1 for more detailed explanation). Gate-keeping, which rations referral to specialist care, is at the core of FM (PEHP,2007).

As mentioned in Chapter 1, behvarzes are based in health houses, whereas, family doctors are based in rural health centres. However, the latter visits health houses to supervise their work. Patients have freedom to choose their first point of contact, either

behvarz at health house or doctor at rural health centre. Patients who go to a health house first and who the behvarz recognizes their need to be seen by a doctor, follow one of three journeys. If behvarz can manage their problem which is the case for simple complaints like cold, s/he does so. In an emergency they are urgently referred and sometimes accompanied by the behvarz to be seen by a doctor in health centre. There are some patients that behvarz recognizes are in need of doctor's visit, either because of following up their chronic condition or more serious but non urgent complaints. They are given appointment by behvarz to be visited by doctor in the next village rota which is not more than few days. Nonetheless, patients have the right to visit doctors at any point of these journeys based on their own will (NUHSR,2005b). What registration statistics show and as I observed in all villages, most people often visit doctors even for commonplace complaints. There is no particular change in behvarz's duties after FM. In fact they were referring patients to rural health centres prior to FM. Introduction of FM enhanced chance to see doctors alongside other changes caused this.

4.1.2 Family doctor (FD)

Family doctor is a general physician who has a medical degree (MD) and is officially entitled to practice. Obtaining an MD in Iran takes at least 7 years, including 1.5 years internship. There are 39 public and almost 80 non-governmental medical universities in Iran, their graduates' ratio is four to one. Medical education is free in the public universities. There is at least one public university in each province which is responsible both for medical education and for health care in that province. Each year the medical schools together produce 4600 graduates of which about 85% are doctors, 10% are dentists and 5% are pharmacists.

Although medical students have to do one month of social medicine in their undergraduate years and one month during their internship, MDs have little training in primary care and management of inpatient cases. It is the social medicine training which is intended to equip them for working in health centres. The MOH is trying to revise the curriculum to strengthen primary care in medical training, but the subject is not taken seriously by the majority of medical students (Couper,2004).

All GPs (general physician- there is a distinction between GP in Iran as general physician, and the UK as general practitioner, but GP in this thesis means the former, unless otherwise stated) must register with the Iranian Medical Association (IMA) to be entitled to

practice. There is a distinction between the IMA and the BMA (British Medical Association). There is no independent organization such as the General Medical Council (GMC) in the UK to register doctors and regulate practice. Rather, the IMA, as one of the oldest non government organisations in the country is in charge of both responsibilities. At present there are approximately 130 000 professionals registered by the IMA, of which 85 000 are physicians, 15000 dentists and 10 000 pharmacists. It issues temporary and permanent registrations for doctors. The registration can be upgraded to permanent upon completing a two-year mandatory scheme (male doctors could attend compulsory army services instead), which has been used for the past 20 years to settle doctors in deprived areas. To be entitled to practice in affluent areas, such as capitals of provinces and big cities, doctors (either generalists or specialists) need to obtain particular scores, which requires several years of practice in deprived areas.

The health care system is based around specialists, especially in private and hospital settings. The earnings and status of specialists are far higher than GPs so there is a lot of competition for specialist training (PEHP,2007). Every year, 1100 doctors are accepted for specialist training or residency (equal to the specialist registrar level in the UK) out of about 12000 applicants. In order to get accepted for specialisation doctors have to develop credit points. This can be done through succeeding in academic entrance exams, but that alone is insufficient. Points are acquired through working in health centres, particularly in rural areas or alternatively two years army services for male doctors (Cheraghali,et al,2008). Age is also an important factor and doctors are not accepted for specialisation after the age of 40. Those wanting to specialise must have done at least two years compulsory rural service, except outstanding students and married female doctors. To date, there is no specialist training in FM in Iran.

The FD is supposed to deliver services to his/her assigned population with no discrimination in sex, age, socioeconomic status, and risk of disease. If necessary, and in order to keep and promote individuals' health, s/he must refer them to specialist care, while remaining responsible for following the case and continuing to provide services. The FD is also the manager of the health team. To enjoy the financial benefits (subsidy) of Behbar, patients must visit the FD first, otherwise, expenses incurred must be paid in full. The FD refers patients and monitors their journey within the health care system (NUHSR,2005b).

4.1.3 Health services package

The package is made up of preventive and curative services, provided by FDs or other members of health teams. It includes (NUHSR,2005a):

- **Prevention**

Immunization, prevention and control of communicable diseases, family planning, oral health, mental health, etc

- **Training and health promotion**

Education and health promotion, teaching healthy life styles, teaching life skills, etc.

- **Acute care**

Services such as visits at the clinic; diagnosis and treatment of diseases; minor and simple surgeries like vasectomy and circumcision, injection, home visits, telephone-counselling, cardiopulmonary resuscitation (CPR), etc.

- **Referral**

Referring patients with special needs to secondary and tertiary care.

- **Health services management**

Medical record keeping for the registered population; inter-sectoral collaborations; and monitoring health team activities.

4.1.4 Health team

Apart from the FD, members of a health team for a population of 2500-4000 are at least two others: a family health assistant or a midwife, and a nurse or a health visitor. By definition, behvarz, and experts in occupational health, disease prevention, mental health, and family health are also members of the team (NUHSR,2005b).

4.1.5 Referral system

Referral is a strategy in which patients visit a behvarz in a health house or family doctor in health centre to seek health care that is included in the health services package (see 4.1.3 above). In cases where the FD cannot manage the problem, s/he fills out a form in the patients' Behbar log-book and refers them to a specialist (secondary care). Behvarz is not entitled to directly refer patients to hospital or any other kind of secondary care. Specialists undertake necessary actions for the patient, record their actions and any needed follow up procedures on the specific feedback forms, and refer the patient back to the FD for long-term follow up. In cases that the behvarz has not been instructed to manage, the patient is permitted to directly visit the FD at first (PEHP,2007; NUHSR,2005a).

4.2 Cooperation between medical universities and provincial MIOs

Prior to the parliamentary approval for Behbar in 2005, the MIO received 90billionTM (£1.00=1800TM in that time) annual budget for the treatment of rural people (MPO,2004). In March 2005, parliament topped up another 325billionTM, crediting the MIO the total amount of 415billionTM to purchase all needed health services at all levels for rural inhabitants. The budget was approved for 500, 485, and 510billionTM in 2006, 2007, and 2008 respectively. Parliament assigned the MOH as the policy maker and service provider, while the MIO was defined as the purchaser and auditor. The provincial branches of the MIO signed cooperation agreements with the DOH (Deputy of Health in the province) while the district health authorities in charge of supervising PHC at local levels, signed agreements with the district MIOs, highlighting items such as (NUHSR,2005,a&b):

1. The average annual budget per capita for primary care for rural and tribal people was 10,000TM.
2. Behbar insurance log-books must be presented to access FM services.
3. Residents without Behbar log-books, or whose log-books were expired, or were not covered by any other insurance schemes, should have to pay full tariff.
4. Behbar insured patients must pay 10% of the visit fee, 30% of pharmacy, lab, and radiology costs, and 10% of inpatient expenditure. The visit fee for holders of insurances other than Behbar was 30%. However, Behbar-insured people in cities with less than 20,000 inhabitants, had to pay 30% of visit fee.
5. Practitioners' payment is calculated on the basis of all served rural and tribal residents, whether their insurance was Behbar or not.

6. Up to 4000 served population per doctor were paid 100% of capita. Health authorities were instructed to avoid assigning more than 4000 people to one doctor. In case it was inevitable, for 4001 to 6000 population and 6001 to 8000 population, they were entitled to 60% and 25% of the capita respectively.
7. Patients who ask for services beyond the content of the agreement, should pay the full tariff, with no respect to their insurance scheme.
8. A village health council must be established in villages with a rural health centre, taking its members from village councillor, 1-2 members of the village Islamic council, the headmaster of the village school, two trustee villagers, one behvarz, and the FD as the head of the council. Health councils were expected to enhance public awareness through advocacy; facilitate the doctor's stay in the village, etc. At the national level, a supreme health council was established. Headed by the president, and the minister of health as the first secretary, the council consisted of many other national stakeholders. The supreme council holds only two meetings and was dissolved soon after the start of implementation.

In Golestan, the doctor's degree of success to establish, run and activate village health councils was scored in performance audits (PEHP,2007). I witnessed a few meetings of village health councils, within which they decided to build sanitary toilets, collect and correct burial of waste, etc. In one village, people contributed up to 70% toward costs to build a new health centre.

4.3 Working arrangements for FM

Villages under health district authorities (11 authorities in Golestan province), are one of the following (Shadpoor,2000;PEHP,2007):

1. Villages with rural health centres (19% of villages nationwide), where health houses also exist.
2. Villages without rural health centre, but with the health house, so-called principal villages. Usually, one or more health houses are supervised by a rural health centre. Health houses which are close to cities might be under urban health centres, called rural-urban health centres.
3. Villages with neither a health centre nor a health house, but under a health house's supervision, so-called satellite villages.

4. Villages with too little populations, where residents are served by moving teams. 81% of villages are either with or without a health house, or moving villages.
5. Suburb villages which are too close to cities and are directly under rural-urban health centres.

On the basis of the recent national census (INS,2007), there are 681 urban points, 66,075 rural points, 2274 rural health centres, 16341 health houses, and 2182 urban health centres in Iran.

For a maximum of 4000 people, one doctor was assigned to a health centre. Every extra 4000 population was subject to be assigned another doctor. For every two doctors, one midwife must have been assigned. In centres with three or more doctors, instead of the second midwife, a nurse must have been recruited. In centres with less than 4000 population, at least one doctor and one midwife must have been employed.

Practitioners, who were already working in health centres, were recruited first. Then, private doctors or midwives who had been working in the area were selected, subject to them closing their own clinics. If there were still centres without personnel, or hard-access centres with less attraction to work in, practitioners in the mandatory scheme could be recruited. In case of childbirth facilities and the presence of a midwife, a nurse could be recruited instead of a second midwife.

Even though it was attempted to assign doctors to a particular population, in practice all doctors were in charge of the entire population served by the centre. Particularly during visits in village rotas, or on occasions where doctors were in rota, patients were visited by any present doctor in the centres. One of the doctors –preferably an official staff of the DOH, was appointed as the manager of the health centre. There was no distinguished incentive for managers, however, the instruction was recently revised to allocate 4-7% of the whole amount of monthly payments for managerial duties. Doctors and members of health teams must have worked 8 hours a day, while time tables varied in different centres. Doctors that were given night shifts must have been available all hours between 4 pm and 8 am next day. FDs were instructed to undertake village rotas for their served population in villages every other day, or at least twice a week. Village rota was mandatory once a week in single-doctor centres. Villager rota for moving villages was at least once every quarter.

The policy emphasized medical record keeping and free first visit to every single villager. FDs were instructed to complete health folders (a form of 4 pages of A4 size to store population health data and results of examination and follow ups) for up to 80% of their population by the end of the first year (for up to 4000 population under cover). Midwives, nurses, and behvarzes were also instructed to attend the first visit. The instruction clearly indicated that health folders must be kept in rural health centres. However, all the six visited health centres accused that because of lack of space they did not keep folders. Folders were stored in health houses which doctors visited once or twice a week. Moreover, most folders were blank or just signed and stamped by doctors. Folders were not being asked for or referred to by doctors upon visiting patients. In one health centre, doctors had been pushed to fill folders for all population within two months. Most folders were filled by behvarzes as a result, however, signed and stamped by doctors!

Doctors were also instructed to not prescribe more than 2.5 drug items per visit; otherwise, costs would be deducted from their earnings. The only exemption was in villages with more than 25% over 50 year olds, where three items per prescription was acceptable. To avoid income deduction, doctors were allowed to order lab test and refer patients to specialist care for up to 10% of their visited patients. The figure was 4% for radiology services, except ultrasound for pregnant women which was not restricted.

4.4 Payment to practitioners

To encourage practitioners to promote health and make them more responsible, a mixed payment method affected by six factors was used:

1. Deprivation index: The average of provincial, district, and rural area, which was a number between 1 and 1.9 (the higher the index, the more deprived the area). Payment to doctors on the basis of only deprivation index was from 110,000TM for index 1, to 695,000TM for index 1.9. The deprivation index for 11 health districts in Golestan was between 1.00 for the capital and 1.9, while the provincial index was 1.18 (NUHSR,2007).
2. Past history: For every year's work as a member of a health team, 20,000TM was added (0 for the first year).
3. Night shifts: For every night stand in the health centre, 10,000TM for single-doctor, 11,000TM for double-doctors, 12,000TM for triple or more doctors and 18,000TM for 24 hours centres was added.
4. Per capita: 130TM per person under a FD was paid.

5. Scattering index: Including the factors such as the number of served health houses by a FD and the distances between the health centre, health houses and district health authority in Km.
6. Performance index: Performance of all practitioners must have been monitored every three months on the basis of check lists containing technical, structural, managerial, satisfaction, inter-organizational cooperation, and following the instruction aspects. If the monitored person achieved 90% of the total score, his performance index was 1.0. Scores between 90-95%, and more than 95% were given performance index of 1.1 and 1.2 respectively. In other word, if practitioners scored 90% in monitoring, their salary was paid in full. For every 1% rise in the index, 2% of their whole salary was added. For scores less than 90%, practitioners' payment was accordingly deducted or their contract became suspended.

The minimum monthly income of a FD, who served 4000 population, with least deprivation and scattering index, whose performance index was 1.0, with no absence and complete night shifts, would be 930,000TM. If the deprivation index was 1.9, there were 5 health houses under his cover, and summation of distances was 160 Km, while other factors were constant, the amount would be 1,600,000TM. Midwife and the nurse followed the same rules and calculations for their income, however different units of payment for indices were used for them. Their salary was in range of 145,000 to 390,000TM.

5 Preliminary outcomes of implementation

It is too early to assess the impact of FM on the health of the population given its recent implementation. No formal evaluation has taken place yet to assess such impact. However, there are a number of improvements, which might be linked to the implementation of FM & Behbar.

5.1 Rise in inputs to the health system

The number of doctors in rural areas which was 2534 in spring 2005 (three months before implementation), jumped to 5808 by November 2007, 3095 of whom were from the private sector, (53.9% from private sector versus 46.1% from public sector). By mid 2007, 73% of rural health centres had one doctor for every 4000 population, while 95% of health centres had one doctor for every 6000 population nationwide; whereas, there was one doctor for

Table 4.1 Changes in practitioners' number before and 18 month after implementation in selected provinces in Iran (NUHSR,2007b)

No of midwives in health centres in the year of		No of doctors in health centres in the year of		Province
Early 2006	Late 2004	Early 2006	Late 2004	
266	0	420	84	East Azerbaijan
90	13	121	79	Ardebil
163	99	224	194	Isfahan
309	125	385	150	Khozestan
<i>191</i>	<i>97</i>	<i>232</i>	<i>123</i>	<i>Golestan</i>

every 9000 villagers before FM (Report to the minister of health,2008). The proportion improved to one FD for every 4250 villagers after implementation. In addition, midwives' numbers dramatically increased from 860 in 2004, to 4100 in late 2007. 86% of midwives were also recruited from the private sector. Table 4.1 shows the figure for some provinces including Golestan.

5.2 Enhanced population coverage

Until June 2007, 24.7 million people in rural areas and cities of less than 20,000 population were covered by Behbar insurance, among them 21.9m (89%) village residents and 2.8m city inhabitants (NUHSR,2007c). This represents 76% of the entitled population. By the end of 2007, 72% of the covered population had been issued Behbar log-books, 4% more than the previous year.

5.3 Increased utilization

The rise in practitioners' number, as well as enhancing access to FD, increased public utilization of services dramatically. Out of the 24million registered population in 2005, almost 6m visited FDs. The number rose to 14m in early 2007. Moreover, by conducting village rota visits, twice a week in health houses, once a month in satellite villages, and once a season in moving villages, the number of visits to FD in those villagers rose from 172,688 in 2005, to 450,098 in early 2007 (NPEHP,2007a).

Predictably, the number of visits to pharmacies also increased, but not in line with the increase in visits to FDs (from 2.8m in 2005 to 8.3m in early 2007), which might indicate improvements in prescription behaviour. In 2005 and prior to FM, only 72 private pharmacies had contracts with the PHC nationwide. The figure rose to 747 in early 2007.

There was also a decrease in referral rate for laboratory and radiology services by FDs, which could be linked to gradual establishment of referral standards and doctors' gate-keeping role. In early 2005 and prior to implementation, 14.03% of cases were referred for laboratory tests. The figure was 10.13% and 8.55% for early 2006, and early 2007 respectively. The figure for radiology services for same time periods were 1%, 1.42%, and 1.39% respectively, which shows a considerable jump at the beginning, probably because of public pressure, which slowed down gradually as expected.

Furthermore, because of doctors' night shifts in health centres in order to provide emergency services 24 hours a day 7 days a week, health authorities attempted to prepare proper living-in facilities for personnel. Number of physical facilities attached to health centres for staff's accommodation jumped from 1445 in 2005 to 2292 in 2006.

5.4 Changes in health indices

Although this thesis is cautious about linking changes in some health indices to FM either because of time span or lack of formal evaluation, a few positive changes appear to have resulted from FM. FM's emphasis on screening four target diseases: diabetes mellitus (DM), high blood pressure (HBP), tuberculosis (TB), and new-born hypothyroidism (NBHT), was associated with a significant rise in diagnosis of new cases of HBP and DM at the starting period of implementation, which shows practitioners' willingness to screen and report new cases, either to get incentives or promote health.

The deduction in these two figures one year after implementation was predictable, because the majority of cases were diagnosed at early stages, after many years of ineffective screening. Furthermore, the number of cases under control for DM and HBP increased within one year of implementation, which indicates more effective methods to manage and control those patients in FM. However, fewer TB cases were diagnosed while FM was implemented, either because of a general reduction in TB incidence (unlikely, as there is no reason for that), or an ineffective method to approach TB in FM. As for NBHT, the number of patients under management considerably rose after implementation. These

data are incomplete for some years before the implementation, when rates were rising so these observed changes may not be due to implementation of FM (Table 4.2).

Comparing results of “vital horoscope”- a circular chart resembling a horoscope and displaying extensive details of births, deaths and family-planning activities, kept in the health houses- years before and after the implementation also suggested some improvements (Table 4.3). Some changes could be easily interpreted as the impact of FM. For instance, frequency of attendance at birth by untrained practitioners, usually lay experienced women, halved from 2002 to 2006. The five fold rise in midwives and attendance of midwives in almost all remote areas of the country might be linked to this improvement.

Although, maternal mortality rate (MMR), infant mortality rate (IMR), and under-5 mortality rate also showed improvements, trend did not reveal any meaningful difference from its pattern during the preceding decade. Therefore, the thesis cannot judge impacts of FM regarding such indices.

Table 4.2 Diagnosis and maintenance of four target diseases before and after implementation of FM (Report to the minister of health, 2008).

Subject	2004 (before FM)	2005 (early stages of FM)	2006 (One year after implementation)
No of diagnosed DM	85,556	94,897	76,542
No of under care DM	102,124	168,009	170,506
No of diagnosed HBP	182,568	204,713	163,597
No of under care HBP	330,158	516,576	505,457
No of diagnosed TB	7977	7693	3951
No of under care TB	9329	9043	4708
No of diagnosed NBHT	N/A	1114	1024
No of under care NBHT	N/A	19,443	26,422

Table 4.3 Comparison of some health indices before and after implementation of FM (NUHSR, 2007b)

Index	1994	1996	1998	2000	2002	2004	2006
Untrained attendance in birth (%)		21.3	17.6	14.2	10.7	8.8	5.79
Crude death (%)	4.3	4.2	4.2	4.4	4.8	4.92	4.68
Infant mortality rate (IMR)	31.7	29.5	26.8	26.3	24.5	22.34	19.01
Under-5 mortality rate	40.2	37.8	33.2	31.6	29.1	26.66	22.81
Maternal mortality rate (MMR)					37.6	32.81	26.65

Chapter 5 Methodology

Introduction

Evaluating complex reforms such as implementation of family medicine (FM) while they are being implemented is difficult for several reasons: the lack of opportunity to use experimental or quasi-experimental methods (Rossi et al,1999); the difficulty to define the objectives of the reform (Le Grand et al,1998; OECD,1994; Orsman,1999; Robinson & Le Grand,1994); the difficulty of determining the impacts of the implementation on the achievement of goals; using performance data, particularly when the data is poor in quality, incomplete, or not available (Drummond, 1995); lack of a governmental system of monitoring and evaluation set up alongside health reforms (Robinson and Le Grand,1994); and other changes in the health system occurring during the period of evaluation (Drummond,1995). In addition, the ways in which decision 'emerge' rather than take place at a single point in time, which are often unobservable to the researcher, can be particularly difficult to explain (Exworthy,2007).

This chapter explains the methodological aspects of the thesis. First, a qualitative approach is justified. Second, any assumption about the design and the way the study is conducted is explained. Third, the qualitative methods to gather data, including semi-structured interviews (the main method), focus groups, observation, and documentary analysis are explained, and their use is justified. Fourth, use of purposive sampling, either for individuals or health centres is explained. Fifth, the analytical approach to data and use of mixed methods of deductive and inductive analysis, as well as the steps taken to conduct and finalize the analysis are described. Sixth, ethical considerations are addressed. The final section of this chapter explains the rationale behind organizing the forthcoming result chapters (6-9).

1 Justification of a qualitative approach

Underlying beliefs are better captured through qualitative studies (Comaroff,1976). They also play important roles in the assessment of health technologies (Black,1994; Leys,2003; Murphy and Mattson,1992; Jaye,2002). They seek to answer the questions on how social experience is created and given meaning to (Denzin & Lincoln,1998).

Today, beyond past debates to prove whether quantitative or qualitative research were more rigorous and reliable, there is widespread acceptance of the qualitative approach in health services research and health policy (Dingwall et al,1998; Giacomini and Cook,2000; and Mays & Pope,1995,1997,2000). Attention is on to how to ensure studies are robust and how to judge the quality of qualitative research (Giacomini and Cook,2000). It is beyond the scope of this thesis to engage in epistemological debates about the philosophy and validity of qualitative methods, but rather it provides information to justify the research design, data collection, and process of analysis and data interpretation.

A qualitative approach was an appropriate method to identify facilitators of and obstacles to implementation of FM in Iran, as well as to understand the impacts of implementation on individuals' behaviours and attitudes (either policy makers and practitioners or the public). Such qualitative stakeholder analysis has been widely employed in the past (Le Grand et al,1998; Robinson & Le Grand,1994; Mays et al,2001). Qualitative approach was described as '*an essential component in health and health services research*' (Pope & Mays,1995). They assert the value of qualitative methods, in a climate where '*qualitative and quantitative approaches to research tend to be portrayed as antithetical*' (ibid,p.43). They explained the role of qualitative research as development of concepts to assist understanding social phenomena in a natural (rather than experimental) setting, giving the emphasis to the meanings, experiences, and views of all the participants. Qualitative research facilitates insight into experimental phenomena, to help answer such questions as what, how, and why. The objectives are to explain behaviours, social relationships, processes and situations, and meanings people give to their activities and the activities of others (Blaikie,2000). Because of the latter specification, the qualitative approach is referred to as '*social constructive or interpretative*' research (Patton,2002). That is, studies attempt to construct reality on the basis of data provided by the subjects. Vickers defines constructed reality in the analysis of decision-making as an appreciative system:

'...appreciative judgements reflect the view currently held by those who make them of their interests and responsibilities, views largely implicit and unconscious which none the less condition what events and relations they will regard as relevant or possibly relevant to them, and whether they will regard these as welcome or unwelcome, important or unimportant, demanding or not demanding action or concern by them' (Vickers,1965,p.67).

There are a number of methodological aspects to consider when conducting qualitative research: well-reasoned sample selection; appropriate data collection for the setting and the research objectives, and comprehensive enough to support rich and robust

descriptions of observed events; and proper and relevant data analysis, with corroboration of findings by employing multiple sources, so-called triangulation. Depending on the objectives of the study, qualitative methods can be used in their own right, or to supplement quantitative data using triangulation (Lincoln & Guba, 1985; Patton, 1999; Stake, 1995; Bowling, 1997), or to complement quantitative work by investigating aspects of quantitative work in need of more clarification.

This thesis is a qualitative study which attempts to provide an explanation of different stakeholders' (policy makers, managers, practitioners, and the public at three levels: national, provincial, and local) attitudes towards FM in Iran, and to analyze implementation by investigating facilitators of and obstacles to it. The study is a concurrent or prospective analysis of a policy process in order to support improvement of the implementation. Stakeholder analyses that focus on positions, power, and perceptions, and behaviour are therefore key to this type of work (Roberts et al, 2004).

Despite traditional attention to the content of the reform rather than the process, even in investigating the primary health care approach, this study took Walt and Gilson's (1994) advice to concentrate much on the processes contingent on developing and implementing change and the context within which the policy was developed. This was necessary to avoid diverting the attention from understanding why desired policy outcomes failed to emerge. The thesis focuses therefore on process rather than on the outcomes or impact of FM, acknowledging Reich's (1994) argument that policy reform is a profoundly political process, affecting the origins, formulation and implementation of policy. In addition to difficulties in assessing outcomes only months after start of implementation, the evaluating process has advantages over outcomes. First, comparisons are not essential in the study process. Second, direct study of processes can identify the obstacles and deficiencies of implementation which need to be remedied (Crombie & Davies, 1998). Thus, it provides indicators for action to improve implementation. There are many examples of failure in the process which are likely to lead to poor outcomes.

The study aims to identify factors which facilitated or hampered the implementation of family medicine in Iran as the core of health sector reform. It seeks to explain why policy on paper was widely different from what was executed. It tends to explore roots of practitioners' perception of the policy, as well as the public (clients'), in order to provide a reliable account to improve the implementation. Therefore, it was essential to get at the narrative behind the policy process, to explore the phenomenon from the perspective of

those involved, and to analyse their views, opinions, and actions. It needed immersion in the policy debates that took place to identify ideas that were held, and influences that held sway. The qualitative approach was especially well suited to the research questions addressed in this research because:

1. To depict the process of implementation of FM, it was essential to understand how people engaged with each other;
2. Usually, different people have different experience from one phenomenon, so their experiences needed to be captured in their own words;
3. The process was fluid and dynamic;
4. Participants' perceptions were a key consideration for process.

Like other qualitative studies, it was assumed in this thesis that there is no single absolute reality, but there are multiple realities (ontological relativity).

2 Researcher's assumptions and position

One of the issues facing health policy analysts is how they are viewed or situated as researcher, their institutional base, perceived legitimacy, and prior involvement in policy communities (Walt et al,2008). Such an issue is critical to their ability to access the policy setting and conduct a meaningful analysis. The case is more serious if the analysis requires engaging with policy elites (Shiffman,2007), and when investigating sensitive issues of 'high politics' (Walt et al,2008), very much the case in this thesis. The possibility that a researcher's constructed realities are framed by his/her dominant views is also high. Strong preconceived ideas affect scientists' work (Kuhn,1970). Epistemological subjectivity is therefore inevitable in a study as this. The traditional distinction of a researcher's positionality often is made between 'insiders' and 'outsiders'. The former may be both participants and researcher, or alternatively, country-based rather than foreigner, which has certain implications for the data collected and the interpretation of research findings, as Merriam et al (2001) explain:

'...being an insider means easy access, the ability to ask more meaningful questions and read non-verbal cues, and most importantly, to be able to project a more truthful, authentic understanding of the culture under study. On the other hand, insiders have been accused of being inherently biased...the outsider's advantage lies in curiosity with the unfamiliar, the ability to ask taboo questions, and being seen as non-aligned with sub-groups' (p.411).

Being an outside investigator is particularly useful for persuading the interviewees to give fuller explanations than they might otherwise have felt necessary. It is said that combining both outsider and insider researchers to gather and analyse the data may yield the richest and most comprehensive understanding of the policy process (Walt et al,2008). Researcher's position has influences on not only access to data but also for knowledge construction (Parkhurst,2002). My position in this research was actually both insider and outsider. As an Iranian general practitioner who had connections to the field, policy makers, and the data, with a reasonable knowledge of the policy and the environment of implementation, I was an insider by definition. I was also an outsider because I was based in London, conducting my study to obtain the degree of PhD at the LSHTM. This dual character widened avenues for cooperation at various levels for understanding the reality. On one hand, I could facilitate organizing the research and appreciate practicalities. On the other hand, I was an outsider for the majority of participants who treated me as someone from London, even though I am Iranian. This helped me a lot in asking taboo questions and attracted interviewees' trust to open accounts which was otherwise not likely. For the general public, it took longer to accept me as an outsider (not someone from the ministry of health or the government), than for practitioners and other interviewees. However, because I stayed in villages long enough and lived with them for a while, they gradually appreciated my position, trusted me a lot more and cooperated well. In addition, although I was passionate about FM and its benefits for the Iranian public, I was neutral to the implementation and was not committed to the government, which made me substantially reflexive to gather and interpret the data. Collectively, I could enjoy or actually combine the benefits of being an insider and an outsider at the same time in this research, the difficult situation which rarely happens in health policy analysis (Walt et al,2008).

As the sole researcher, I devised and conducted the interviews (individual or group), selected the documents for analysis, and carried out the data analysis. Therefore, my personal values, beliefs and perceptions have influenced the study. Despite this, I have attempted to remain open and sensitive during the design, data collection, and analysis and to link the meanings and subjects' perspectives. My supervisors' perspective as well as other advisors' enabled me to approach the study design and data analysis critically, corroborate relevant themes to pursue, read and re-read the data to identify supplementary themes worthy of exploration. I also tried to remain reflexive during the entire process of the research, and explicit within the analysis.

Being a medical doctor with only a few years of clinical experience in Iran, most of my professional career has been in management and administration. Armed with managerial knowledge and experience, I have been looking critically at the Iranian health system through the lens of improving efficiency. Moving to the UK in 2004 enriched my personal experience as a user of GP services, and opened my eyes more widely to the reality of rationing health services and gate-keeping in one of the most comprehensive primary care systems in the world. Even though my UK experience was hard for my habit of using all care services at a very cheap price, I realized how effective rationing services could be in reengineering the health system. Therefore, I developed a particular interest in the policy of FM in Iran. However, as the main topic in this research is not an epistemological debate on whether FM is the right policy or not, my views should not have overly influenced my approach to exploring what factors have been facilitating or hampering its implementation. Rather my own views on the policy have been further influenced by this research.

3 Study design

In accordance with the aim and main objectives of the study, multiple methods of data collection were used including: literature review, semi-structured interviews with individuals, focus groups, documentary analysis, and field observation. In order to make sense of the policy and the environment of implementation, a feasibility study was also conducted in December 2005- January 2006.

3.1 Literature review of theories of policy implementation

A literature review was conducted between November 2005 and February 2006 to identify theories of implementation in public policy (Chapter 2). The review covered the different approaches to implementation of a policy, from the traditional dichotomy of top-down and bottom-up, to modern synthesising approaches. The review contributed to the conceptual framework of the study as well as the interview guide.

3.2 Structured review of facilitators and obstacles

A structured synthesis of empirical studies on implementing reforms was conducted between February 2006 and May 2006, which identified facilitators of or barriers to implementation (Chapter 3). This systematically categorized factors and resulted in the design of the dynamic model of implementation, which contributed to the conceptual

framework of the research and the design of the data collection. Emphasis on semi-structured interviews as the main source of data collection, alongside other methods, was in part the result of the review.

3.3 Feasibility study

Prior to designing the main study, I paid a visit to Iran in December 2005, during which I interviewed five national policy makers and four managers, civil servants, and practitioners in three provinces where FM was being implemented, using a preliminary interview schedule, and gathered some documents. The purpose was mainly situation analysis to get familiar with the macro picture of implementation of FM as well as arrangement of practicalities. Interviews were only part of the feasibility study to cover broad aspects of the implementation. I did not pre-test the interview guide by situation analysis. The time of the visit which was only five months after starting implementation, was appropriate to understand what was going on in the early stages. This clarified the reality of implementation, reasons for concurrence with Behbar, the measures that had been taken, and future plans. Local visits helped appreciate the distance between the centre and the periphery, and to make me aware of day to day practical challenges.

The visit was also helpful in understanding the context and intentions behind the policy. It helped identify suitable questions for the semi-structured interviews and clarified the areas in need of more focus within the field work. I also established a relationship with the different stakeholders, whose agreement was vital to conducting the field study, many of whom were potentially national level interviewees for the main study. Forming such a network of stakeholders facilitated access to key informants and influential policy makers during the data collection. In addition, I obtained the Golestan province health officials' agreement to conduct the fieldwork there and given the long process of ethical approval in Iran, I submitted an official request for ethical approval to both the MOH and the Golestan University of Medical Science & Health Services (GMU).

3.4 Methods of data collection

3.4.1 Semi-structured interviews

Interviews were the main method of data collection in this study. Interviews were to explore perceptions, meanings, attitudes, past experiences, definition of situations, and

constructions of a reality which was development of the policy (Patton, 2002). Jones also writes:

“In order to understand persons’ construction of reality, we would do well to ask them...and to ask them in such a way that they can tell us in their terms (rather than those imposed rigidly and a priori by ourselves) and in a depth which addresses the rich context that is the substance of their meanings” (Jones, 1985, p.46).

Semi-structured interviews employing a set of open-ended, core questions as an interview template, is a useful technique in seeking explanations to specific issues (Mays, 1997). Interviewers must be open-minded, introduce divergent questions at the times, and also take into account any new concepts and frameworks proposed by the interviewees (Britten, 1999). Interviews allowed interviewees to offer their views on political and challenging aspects of implementation, freely and in their own meaning. I used open-ended questions to get the interviews going and keep it moving. Specific questions emerged as the interviews unfolded, and the wording of those questions depended very much on the directions the interviews took (Punch, 1998). I guided the direction of the interviews but without being too intrusive. The semi-structured nature of the interviews allowed me to pursue a flexible line of questions, in case issues came up in a different order, before returning to other scheduled questions.

I conducted face to face semi-structured interviews using a generic interview guide, incorporating the objectives. The interviews were undertaken from November 2006 to May 2007 in two planned phases. There was no hierarchical order in interviewing. Although I started with national stakeholders, on many occasions I went to Golestan and interviewed provincial managers. However, no interviews at the local level were conducted until six health centres had been selected. During the first phase (up to February 2007), I interviewed three health centres, all provincial managers and 11 national policy makers. The second phase was from March 2007 and completed data collection to May 2007.

The generic interview guides were adapted for particular groups of interviewees at the three different levels: national, regional, and local (Appendix II). The guide was used to ensure that all questions were covered uniformly for all participants. In addition, multiple probe questions were developed for each question. The interview began with a general question about the policy and the specific involvement of the interviewee. This led to particular issues like their experience of implementation, finance, logistics, political

capacity of the reform, coordination and cooperation in implementation, and finally around other issues that interviewee was willing to talk about. Depending on the position and capacity of interviewee, every interviewee had a tailored interview guide to reflect his individual position. 17 interviews were conducted at national level, 2 at international level (with the country representatives of the WHO and his senior health policy advisor), 9 interviews with provincial officials, 11 interviews with district health authorities, and 39 interviews at local level with family doctors; nurses; midwives; auxiliary health technicians including mother and child health, environmental and occupational health, and tackling communicable diseases staff; managers and administrative staff, as well as representatives of the public at six selected health centres across 11 health districts in Golestan province. Four private doctors were also interviewed. Typology, capacity and position of interviewees at each level are described in Appendix I.

Interviews lasted from 30 to 110 minutes with an average of 70 minutes. Two interviews, one at national and another at provincial level, took 2.5 and 3 hours because of the interviewees' desire to discuss historical background of the reform in detail. Interviewees were asked to express their own personal views, rather than speaking on behalf of the institutions that employed them at the time the policy was designed or currently.

Except for two interviews with international stakeholders which were in English, all interviews were conducted in Persian (Farsi). Only the quotes used in this thesis were translated into English. I was reflexive (taking context and culture into account rather than word by word translation) in translating quotes to English. Except on a few occasions, the translation was straightforward and I did not detect any major difficulty. In addition to an explanation of the study and interviewees' rights, all interviewees were provided with an information sheet beforehand containing an abstract of the study, perspective of results, expectations of the interviews, their rights, their potential contribution to the study, ethical considerations like data confidentiality, my profile and contact information (Appendix IV). The place of interviews depended on the interviewees' choice and convenience. At national levels, most interviews were conducted at interviewees' offices. Except for three national policy-makers, who were interviewed two and three times, as well as two provincial managers who were interviewed twice, all participants were interviewed once. Splitting interviews did not happen except for one key national informant, who was interviewed in three stages: while he was driving to attend a meeting, in the recovery room in a hospital when he had completed an operation (as a surgeon) and the last part at his home. This interviewee was a key informant who contributed a lot to establishing FM as a

policy in the former government. He was no longer in that position and was reluctant to be interviewed. I made myself flexible to his preference in order to not lose his accounts. Despite practical difficulties in arrangements, I did not face any problem in splitting his interview in three phases and I could reflexively cover the tailored interview guide with him. Such interviewing conditions did not affect the quality of interviews. Interviews with provincial officials were also mostly conducted in their offices, except one in a classroom at a teaching hospital. I interviewed local staff either in clinics or offices (managers) or at their place of residence attached to health centres. I interviewed public representatives in health centres, health houses, homes or their place of work. A few interviews were interrupted because of many factors like calling the interviewee to visit a patient, emergency meetings, etc. Nonetheless, none of interviews were left uncompleted because of interruptions (Britten, 1995).

Interviews were digitally audio recorded (with the interviewees verbal consent), except one at provincial level when the interviewee refused the request for recording. In addition, I made notes during interviews to capture the timing of particularly important points and key phrases. When possible, I reflected and made notes on key points soon after interviews. This was quite useful, particularly as a back-up mechanism in case files were lost, which is what happened after interviewing a district health manager, with no possibility for a second interview. The recording was checked after each interview, the interview process critically reviewed, and the interview schedule amended. During interviews, I attempted to clarify my understanding of some specific sensitive issues by complimentary questions, to ensure full responses to the question.

Recordings were transcribed by two professional transcribers, typed in a specific format and checked by me against the recordings (at least twice) to ensure accuracy. Some direct attributable quotes were also checked with interviewees.

3.4.2 Focus groups

I conducted three focus groups with representatives of the public in three villages to explore service-users' views (Coreil, 1995). The main advantage of focus groups over one to one interviews is creating an environment to encourage people to interact with each other in a natural setting, so the interaction is analyzed rather than isolated views. It encourages a wide variety of participants to communicate, which can reveal additional

realities (Kitzinger,1994). It also encourages debate which brings all views that not otherwise have surfaced.

To enjoy such cited benefits and in order to create a dynamic environment for public representatives to express their experience, I planned to conduct six focus groups; one in every single village. However, in practice I could only arrange three for several practical reasons. In two villages, because of the campaign to run for the local council elections, the majority of potential participants rejected to sit together accusing others of exploiting the outputs on their behalf. In one village, my plans to hold focus groups failed twice for unexplained reasons. I was later informed it was due to the imam's unwillingness. Nonetheless, I interviewed six individuals as public representatives in villages that focus groups failed to be held (Appendix I). Participants in focus groups included 8-11 public representatives: village councillors, Imams, mayors, teachers, elderly trustees and, in two villages where behvarz was also a council member, behvarzes were included. The sample might not have statistically represented the larger village population, but it covered a range of accessible, informed, and trusted people who knew each other and had something in common (Green & Browne,2005,p.65). I identified these elites through local organograms either in the capital of the province or in district health authorities, and/or snowball techniques to identify key people at each village. Then I asked behvarzes' assistance in each health centre to organize and invite the identified participants. One focus group was held in the behvarz's house, another in the village council building, and the third in the Imam's home. I obtained participants' verbal consent to audio record the whole session, unless they asked me to mute. I also took some pictures with participants and added photos to sessions' documents. Although I did not have any specific guide as in the interviews, I had a list of broad areas that I wanted to be covered in focus groups. That simple guide was a summarized and simplified version of the interview guide at the local level. I intentionally avoided such a detailed guide to give greater fluidity to the sessions and leave participants with their own account of priorities in a main agreed discipline. In the beginning of each session, I explained the study to participants, the reason for inviting them and asked them to talk about FM and Behbar, their personal experience, their preference to seek care, the possible changes after implementation, the challenges, their expectation, their understanding from the policy, and their assessment of implementation.

I tried to achieve a reasonable understanding of local social, cultural, and political context prior to running the focus groups (Vissandjee, Abdool & Dupe're',2002). I did so either by asking local experts in the district to explain the characteristics of the village and

relationship hierarchies, and/or by reading the documents regarding the characteristics and demography of area. I obtained this information either from the centre/district or the village authorities including health centre. I also tried not to interfere in their discussion, not interrupt their talk, and act only as a facilitator. I was aware of the power imbalance among the selected participants, however, such a limitation was inevitable, particularly in two groups in which Imams attended.

Each focus group lasted from 1.5 hours to 2.5 hours. They provided the view of public representatives as well as their perceptions and expectations of the reform. It was also helpful to identify five public representatives with greater potential for individual interview. I was cautious in not interpreting focus group data (public representatives) as the public's view, because of asymmetric information between them and the public. In addition, most elites (except council members) were not elected, so by default were government employees. Some representatives were even insured by other insurance schemes than Behbar. Therefore, I avoided interpreting their perceptions as that of the public. As a result the thesis will not have captured an accurate account of the public's experience. In addition, the fact that I could not run focus groups in three of the villages might have restricted the extent to which the views of public representatives at all six centres were addressed. However, I conducted individual interviews with some public representatives in villages in which focus groups did not take place. Thus the limitation of this thesis to address the public's view also applies to those health centres.

Throughout Chapters 6-9, quotes from the public representatives including Imams, teachers, councillors, mayors, etc, derive mostly from focus groups. As clarified above, some quotes were extracted from individual interviews. I have not separated these two sources of data within the text to make the text smoother to follow.

3.4.3 Observation

To compliment the interviews and focus groups at the local level, I observed the actual practice in all six health centres and took notes. I had a simple checklist for observing facilities, practices, and equipment in health centres. I wrote down the list of existing equipment and described its structure in my notebook. I also visited different sections of health centres and took notes about them. Depending on health centres (they varied in terms of services they covered and amenities they had), I made notes about the quality and size of the building, how physical spaces were allocated and used, staff behaviour

with the public, administrative procedures from the time of admission, doctors' and other practitioners' consultation with patients, drug warehouses (if there were any), and how drugs were kept and prescriptions were dealt with. I wrote down what I observed from laboratory and radiology facilities in centres with such sections. Observations were with patients' permission. I also sat with doctors and observed their interaction with patients. I was curious to understand how and under what conditions doctors refer patients to other levels of care. Besides, I visited practitioners' accommodation which in most cases was adjacent to the health centre and learnt about their facilities.

I paid a tour visit to every village and wrote my observations about the general specifications of the village. I randomly accompanied doctors and midwives in some village rotas, during which I recorded the same subjects as above with regard to health houses, the way that practices were conducted, facilities and general conditions. Such process of observation was followed in all six health centres and their supervised health houses and villages. In addition to notes on observation, I recorded my initial impressions, analytical thoughts, and possible interpretations, openly in the note book during the observational periods. I did not separate these at the time, to ensure it was a written record. I followed the general recommendation to review field notes soon after the period of observation, which facilitated both further recall of the events observed, as well as the possible disaggregating of the data into descriptive and analytical components. When possible, I also took pictures and videos of health centres, mainly to record the environment, equipments, and facilities. I employed observation as my tool for understanding what is practiced in family medicine and the condition of health centres that are implementing the reform, only as a supplement to the main sources of data, individual interviews and focus groups. Observation was an appropriate tool to verify talks and contextualize findings which was beneficial for increasing credibility of findings (Silverman,2000).

3.4.4 Documentary data

Documents are products of structured and informed social practices derived from the decisions which people make as individuals and members of groups and organizations (May,1997). Documents, such as public papers, agenda papers, internal documents, minutes, correspondence, national bills and legislations, annual reports (official and nonofficial), reports on evaluation of practitioners' performance, magazines, newspapers, emails, etc, are a rich source of data in this research. Given the nature of this study in analyzing the implementation of a health policy, analyzing documentary data was

informative. Information derived from documents can be utilized either straightforwardly or interpretively, to produce primary research findings or for verification purposes (Mason,1996;Patton,2002). I used documents as supplementary sources of data to validate other data:

"In conjunction with other data, documents can be important in triangulation, where an intersecting set of different methods and data types is used in a single project" (Punch,1998,p.190).

Moreover, I used documents to enhance my understanding of the policy, as well as to provide some quantitative data. Documentary data in this research allowed access to data that was otherwise unavailable. As documents are social products, they must be selected and analyzed cautiously, taking into account not only their content, but features such as their production and functions (Prior,2003). Given that, I tried to take Jupp's four key considerations (Jupp,1996,p.303) to evaluate documents: authenticity (being original and genuine), credibility (accuracy), representativeness (being representative of the totality of the documents of its class), and meaning (what to say). Based on this, I used many policy and evaluation documents published by government bodies, particularly the MOH, the MWSS, and the MPO and their subordinate institutions. I also treated contents of some specific website such as TAKFAB (the official website of the MOH for FM), and some press websites as documents to keep up to date with the progress of implementation. Because the policy was not appropriately documented, and its components and relevant reports were scattered across different organizations, I sought document from a variety of sources. I was also updated on documents so as to achieve as a comprehensive intake. I selected documents that:

- explained the history of development of the policy;
- described policy (FM) revolution and revisions, its content, political and social debates on that and reasons that resulted in its merger with Behbar;
- reported the progress of implementation of FM and Behbar and challenges ahead, annually, quarterly or on irregular basis;
- reported the results of auditing performance of practitioners and managers with regards to implementation of FM;
- described the policy, its benefits, prospective outcomes, etc, for various groups of stakeholders, either presentations or correspondences;
- explained progress of implementation, stakeholders' attitude and expectations, and decisions made to address such concerns, mainly newspapers and magazines, as

well as surveys and intra/inter-organizational correspondences, confidential or non confidential;

- prepared to educate various groups of practitioners and public regarding the policy and its revisions.

I used both published and unpublished documents. I read all documents that I gathered and categorized them using the above classification. In cases that content of the documents were contradictory, I asked relevant organization for clarification. In some occasions, I compared documents with other sources of data, particularly interviews, to add to my understanding or resolve confusion. I categorized findings of documents in above mentioned categories and fed them into the thesis to paint a picture of the policy and its components, as well as keeping updated with the pace of implementation. Chapter 4 is mainly based on the results of document analysis. Nonetheless, I used documents only as complementary source of data in this thesis.

4 Sampling

I took my general rationale for sampling individuals and health centres from Patton:

“Qualitative sampling designs specify minimum samples based on expected reasonable coverage of the phenomenon given the purpose of the study and stakeholder interests” (Patton, 1990, p. 186).

This section explains sampling individuals and local health centres, where data was collected from local people, either practitioners or the general public.

4.1 Selecting individuals

Following the feasibility study, I concluded that worthwhile data could be collected for at least one province (Golestan province in north-east), which was diverse enough to meet most aspects of theoretical generalization and would provide a large enough sample to meet the purpose of the study. Having studied sampling, I also realized how important it is to broadly consider Patton's phrase “stakeholder interests” to select participants. Given the political nature of the topic, such a sample would be sufficient to convince stakeholders that the analysis and results could apply to them. To achieve that, rural health centres had to be purposively sampled to ensure the variation between them was represented. Interviewees at any level would need to be purposefully selected in a way that represents

influential stakeholders in making, implementing, and evaluating the policy (Silverman,2000).

I used a purposive sampling strategy to identify relevant individuals at the national and the provincial levels. I began by identifying three key informants in the MOH. During interviews with them, ten other national policy makers were identified using snowball or chain sampling (Peters & Waterman,1982). Four other national officials were also identified from documents. I also used documentary data and conversation with others in the policy network to gain a view of their ideas, role and position within the policy cycle.

4.2 Selecting health centres and local participants

To understand the reality of the implementation of FM in the periphery, it was necessary to investigate the local level. The Golestan province was chosen for the following three reasons:

- 1- Great diversity with respect to ethnicities, religion, language, and socio-economic status. The province is small in size, but includes five major ethnicity groups as it is a favourite destination for various groups of immigrants. It is among few provinces that the Sunni religious minority have lived for long (almost 35% of population). Two languages and five dialects of Farsi are spoken in Golestan. The province also shows a significant socioeconomic disparity, with west as affluent and east as very deprived area, only within 160 KM diameter (MPO,2004).
- 2- High proportion of rural population (55% vs 45%). The national proportion of rural population is 35%, versus 65% who live in urban areas (INS,2007). Golestan is among few provinces in which bigger proportion of people reside in rural areas. Because FM and Behbar are implemented in villages and small cities at the first phase, this could be a benefit in selection as it is mainly a rural province (MPO,2004;INS,2007).
- 3- Size and location of the province. The province is small in size, but has been recently separated as a new province. This is why authorities have greater desire to cooperate in different projects and prove their capabilities. This provided me with good cooperation and willingness to conduct the study, which was crucial to manage data collection.

Six rural health centres in Golestan were identified for local studies. To select three health centres with good and three centres with poor implementation, out of the 134 rural health

centres in Golestan, I consulted provincial managers in the DOH (deputy for health in the medical university of Golestan) and the GMIO (provincial office of the medical insurance organization). They formed a committee of experts that met for a day workshop at which I explained the research, its aims and methodology. I asked the committee to rank the top ten and bottom ten health centres in the province, regarding progress with implementing FM from their point of view. I explicitly asked the committee not to count on health indices or outcome to rank health centres. Rather, because they were all involved in auditing the centres, I asked them to use their perception of progress in FM with regard to managing practicalities, allocating logistics, service delivery, personnel turnover and perceived public's satisfaction of services. Such a heuristic approach was inevitable given the implementation of FM at early stages because of which no formal quantitative evaluation existed. In addition, such good and bad categorization of health centres was only an auxiliary measure to maximise the diversity of included health centres, along with other considerations discussed below. It took two days (not continuously though) to identify the top and the bottom ten health centres. I then asked the committee to rank three of each list, taking into account the local population in terms of ethnicities, socio-economic status, religion, climate and geographical status, TB and HIV/AIDS status and distance from capital of the province. After three days discussion, six health centres across 11 health district authorities of Golestan were ranked as three good and three bad centres. Again, I need to reemphasize that this method for selecting health centres was an attempt to achieve as much diversity as possible so as to represent the entire province.

I divided studies of the health centres into two phases, using observation in the first phase to inform the second phase. Collecting data at provincial and local levels followed the same flexibility as between national and local levels, easily moving along one level to another.

Prior to local data collection, I met officials at the district health authorities including the head of the authority, who was usually an experienced GP, the head of district PEHP, administrative, IT and financial staff. This was to become familiar with the area, and to seek experience of implementation, as well as to gather documents about the implementation. I also invited the health district managers to accompany me in the first visit to each health centre. We usually had a formal initial meeting attended by all staff in the health centre, where I explained my research, their role, their rights and responsibilities, and expectations, and enabled everyone to introduce themselves. Such sessions were useful to break the ice and to create a better environment for cooperation. I

then recruited staff for interviews. The strategy was to interview all the doctors in single and two doctor handed centres, and two or three doctors in centres with more than two doctors, one of whom was the head of the health centre. None of centres had more than one nurse and one midwife in charge of FM, so all were interviewed. There were midwives in some health centres who had no relation to FM, some of whom were also interviewed. Occupational health experts, disease control experts, dentists and administrative staff were also invited for interview.

5 Data analysis

In most qualitative research the analysis begins during data collection, as the data already gathered are analyzed and shape the ongoing data collection (Patton,2002). Most research is an interactive process of deduction and induction; a '*search for regularities and cumulation*' (Dingwall et al,1998). In this study, where I have been the only person undertaking both the data collection and the analysis, it was not feasible to maintain complete distance from the data before the commencement of the analysis. Data analysis in this study therefore began alongside data collection. This sequential analysis (Becker,1971) or interim analysis (Miles & Huberman,1984) had the advantage of allowing me to go back and refine questions, develop hypotheses, and pursue emerging avenues of inquiry in further depth in later interviews. Crucially, it also enabled me to look for deviant or negative cases. Theory has both informed and been informed by data analysis in this research. The review of the theoretical literature helped me establish a set of explanatory theories to be tested, as well as providing themes around which the data analysis was organized.

5.1 Documentary analysis

I started to analyse documentary data prior to the interviews in order to assist identification of key themes on which to base the interview topic guide. I also used the content analysis approach illustrated by May (1997) and Ericson (1991) to read, conceptualize, and interpret the text according to specific themes, and picked out pieces of information relevant to the process of implementation of FM in different stages. I categorized documents and their themes under the same categories as for selecting documents. I created an Excel sheet (Microsoft,2003), in which columns were the category of documents and rows were filled with name and code of document. I carefully read all documents first and highlighted sections which were relevant to selected categories, or

might be used for updating the implementation status. This shortened the next journey for synthesis. For documents which I had a Word version, I copied the relevant part and pasted in related cell against its appropriate category. However, because most of documents were hardcopies, instead of texts I wrote down page number and paragraph number for future use. I then checked all cells in each category together and identified discrepancies for further investigation. I updated categories and relevant texts based on ongoing document collection which enabled me to enrich my understanding about the policy. I then put different cells in each column together and revised it to paint whole the picture around categories. Such information was assembled and shaped afterwards, to narrate the policy development and implementation, in relation to the conceptual framework of the thesis. I examined the documents not only for their content, but also for the context in which they were produced and functioned, as explained in selecting process for documents.

5.2 Deductive approach in analysing interviews

For interview data analysis, I mainly followed the deductive method of the 'framework approach' (Pope et al,1999; Ritchie et al,2003; Ritchie & Spencer,1994), not overlooking the emerging themes which were revealed whilst reading and rereading data, particularly for the analysis of key informant interviews at the national level (Patton,1990; Green,1998). In addition, wherever theoretical reasoning and the conceptual framework were not supported by the data, superiority was given to the data, following an inductive approach (Pope et al,2000).

The approach was suitable for this study because objectives were set in advance, and the research was guided by a conceptual framework. It had two main advantages. First, no specialised electronic data management package was used; instead I adapted tables produced in Microsoft Word software (the 2003 version). However, the process could also be undertaken using manual spreadsheets. Second, the framework approach has been mainly developed to analyse qualitative data in policy-oriented research (e.g. Griffiths et al,2001; Rashidian & Russell,2003; Rashidian et al,2008). This thesis aimed to detect factors which influenced implementation, the method was useful therefore to fulfil this task:

"...qualitative data analysis is essentially about detection, and the tasks of defining, categorising, theorising, explaining, exploring, and mapping are fundamental to the analyst's role" (Ritchie & Spencer,1994,p.176).

5.2.1 Framework approach

The framework approach has five main steps:

1. familiarization
2. identifying a thematic framework
3. indexing
4. charting
5. mapping and interpretation

Having conducted all interviews, I was already familiar with the data. Despite this, I took Ritchie and Spencer's (1994) comment and started analysis of interview data by listening to recordings and matching transcriptions with audio files, particularly because transcribing had been carried out by others. I listened to all interviews at least twice, during which I developed a summary content form for each interview (Miles & Huberman, 1994). Then I stated to identify key themes by reading transcriptions. I developed the preliminary thematic framework based on interviews, the earlier feasibility study, documentary data, and findings from the literature review (Chapter 3). As mentioned earlier, I divided data collection into two phases, to provide the opportunity for comparison and improvement. Therefore, the preliminary thematic framework was based on interviews with two international managers, 11 national policy makers, 6 provincial managers, and staff and the public representatives in three health centres, as well as contributions from documents and the literature. Dividing the analysis into two phases was useful for looking for more challenging issues in the second phase of interviews, as well as for identifying themes. After improving the initial thematic framework, I rechecked the themes against transcripts and updated them. The initial framework contained 18 themes, which reduced successively to 12, 8, 5, and finally 4 themes, employing a non-strict adoption of grounded theory (Barbour, 2001).

In the third phase, the transcribed text was 'indexed' using the codes relating to the themes and sub-themes of the thematic framework. Some sections of data were indexed with one or more codes (cross indexing). I produced one table for each theme in Word format, assigning each table row to one interviewee identified with the appropriate code, while table columns were assigned to sub-themes. To conduct the charting phase, I added the tables together, which created a large table of many cells within which each cell corresponded to the views expressed by one interview coded for one sub-theme. I reread the data and re-coded some parts then, and checked the internal consistency of the codes

by reading the content of the codes and checking that they matched the definitions, which resulted in recoding some texts at this stage. The data extracts were then cut and pasted from the indexed texts to allocated cells on the chart. The method enabled me to compare single interviewees' views on different themes and sub-themes (looking across the rows), as well as to compare different interviewees' views on each theme (looking across columns). I read the main transcriptions several times after writing the first draft of the results, revised the codes where necessary, added new themes or sub-themes, and updated the chart. I also investigated the relationship between themes and the sub-themes to enhance the consistency of coding.

Undoubtedly, throughout the analysis my own 'hunches' and insights led me to focus on certain themes in greater detail. Advanced preparation of preliminary themes on the basis of the feasibility study and literature provided a clear structure to guide the analytical process.

Brackets at the end of italic statements refer to the interviewee codes. To quote from the interviews, each interviewee was represented with a code which started with the letter 'N' for national level, 'P' for provincial level, and 'L' for the local level. To meet anonymity and confidentiality, I categorized national interviewees to three categories of purchaser (PU), provider (PR), and others (O) including other insurance companies than the MIO, MPs, people from the management and planning organization (MPO), former ministers, etc. At the provincial level, the same rule as national categorization applies. At the local level, the digit next to the letter 'L' indicates the health centre (1 to 6), and the other number (1 to 9) shows the particular interviewee. Letters FD, M, N, and E next to the local numbers, respectively represent family doctor, midwife, nurse, and other staff in the health centres including infectious disease, environmental, occupational, and family planning experts as well as administrative personnel. District officials at local level are mentioned as DA in the brackets. I admit that such a categorization might prevent the reader to justify opinions by realizing the precise position of interviewees. However, this is at most which could be declared to adhere to anonymity, considering ethical commitments.

I followed the same rule in transcribing and analysing focus groups. Due to the interrelated nature of the analysis, I did not separate focus group data from individual interviews, but incorporated them within the analysis.

6 *Ethical considerations*

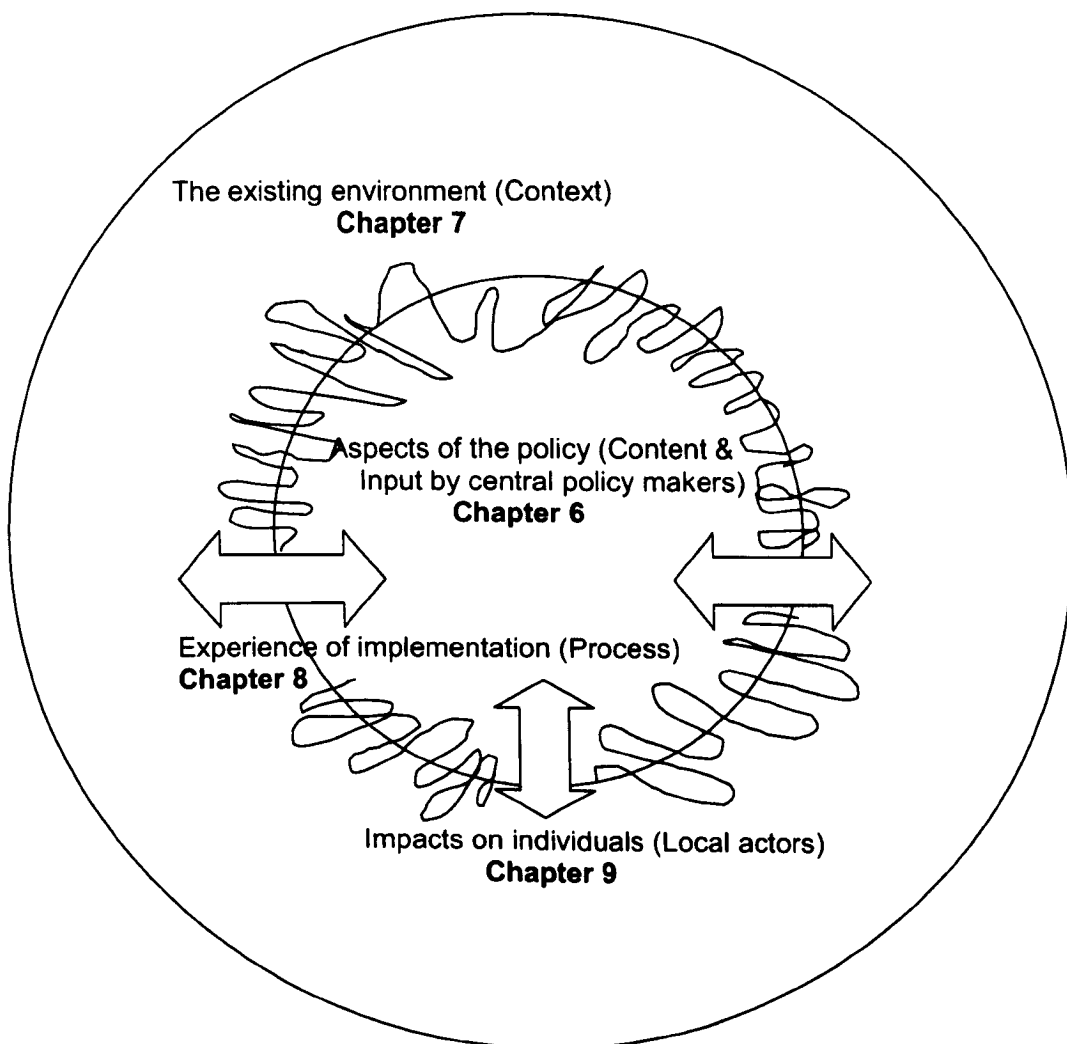
I carefully considered the ethical issues. The participants were given an oral and/or written explanation about the purpose and method of the study, as well as their responsibilities and rights. The time, venue, and method of interviews were mutually agreed upon. I reiterated the purpose of interviews and the study objectives at the beginning of each interview, when I asked participants for permission to audio-record the interview. I coded all audio files and kept them secure and confidential. I provided two backups of recordings and transcriptions. I assured participants that the thesis or any other output produced from this research would not identify any specific individual, village or health centre. The study was approved by the ethics committee of the LSHTM and the GMU in Iran. No honorarium was offered to the participants. Some participants' request for in advance access to the results of the study prior to publicizing was turned down.

7 *Organization of the results*

The results are presented in Chapters 6 to 9. As explained, the thesis adopted four main themes to categorize the findings, within four interrelated and dynamic groups. The thesis develops a framework which highlights the importance of the dynamic inter-relationship between the four main components of health policy. (Figure 5.1). The framework is employed here as a roadmap of the results.

Appreciating Manor's (1991) argument of the need for 'thick description' rather than a 'parsimonious model', the framework acknowledges the importance of looking at the content of the policy, the processes of policy making and how power is used in health policy, as well as how interactions between actors as well as actors and the environment influence the policy. Such a categorization also means understanding the process through which such influence is played out and the context in which different actors and processes interact. This dynamic framework reveals a clear distinction between central and peripheral stakeholders, which reflects the consequences of imposing policies and the top-down approach to policy.

Figure 5.1 Dynamic framework for health policy analysis: a roadmap of the results chapters



Based on the framework, the results chapters cover:

- aspects of the policy (content and intentions of central actors);
- the existing environment (context);
- the experience of implementation (process); and
- impact of the policy on local staff and public representatives (local actors).

The framework is a simplified approach to a complex set of inter-relationships. It seeks to understand the reality of implementation by appreciating how actors influence the context within which they live and work. Therefore, while it helps to systematically investigate factors which influence the policy, it acts as a map that shows the main roads. Buse et al's (2005) description applies here that has yet to have contours, rivers, forests, paths and dwellings added to it.

In addition, the organization of the results chapters helps analysis and understanding the policy itself (analysis of policy) or it can be applied to plan for improving FM (analysis for policy). This thesis seeks to do both: a retrospective exploration of the determination of FM and what it consists of, and suggestions for the future of the policy to improve its implementation, by reflecting on practical implications.

Before reading the results, I would like to reemphasize that findings in this thesis are accounts of the participants. The data presented here are the way that people presented themselves and expressed their views, attitudes and accounts about the implementation of FM, which was then analysed and thematically categorized using robust methods. Such a process was inevitable in this study as it takes into account the complexities of evaluating the implementation of a policy once the perspectives of policy makers and other stakeholders are taken as central to understanding their options and choices. Much of health policy analysis involves giving meaning to what actors behave. And finally, the definitions and the way in which they were translated into practice might vary and evolve over time as the intellectual, social, and economic environment changes.

Chapter 6: Aspects of the policy

Introduction

Perceptions of interviewees about aspects of the policy are investigated in this chapter, considering both positive and negative aspects. These accounts have been interpreted based on analysis and I did not ask respondents directly to express pros/cons. Rather I interpreted them in analysis. It is likely that many interviewees often do not cover both aspects. Therefore, I need to make it clear that pros and cons views here might have been expressed by different and/or sometimes same persons. Aspects of the policy that respondents felt promoted its acceptance were:

- Focus on health;
- Improved efficiency;
- Improved quality of care;
- Increased confidence in doctors;
- Purchaser-provider split;
- Expanded provision of services;
- Expanded entitlement;
- Better employment opportunities;
- Increased pay for practitioners;
- New payment framework;
- International basis of the policy.

In contrast, the policy was criticized because of the following:

- Top-down approach;
- Lack of sustainability in funds;
- Ambiguity;
- Too much flexibility;
- Lack of local customization;
- Impracticalities;
- Unreliable expectation.

1 Aspects that promoted acceptance of the policy

FM was widely believed to be the only option to reengineer the health system. Apart from their interpretation of FM, the majority of interviewees branded FM the right policy for reform:

"Rationally, you have got no choice but FM because demands are high, resources are scarce, and you have to endorse grading..." [N10,PR,national policy maker].

Regional stakeholders echoed national policy makers:

"...the policy itself is a right one. We had to start from somewhere. We could not just watch continuity of this messy system, and wasting of our resources ..." [P3,GMU,provincial manager].

Even in remote parts of the country, practitioners supported the policy:

"...FM brings more standard services. There is no choice left other than FM to answer the public's current needs..." [L1.7,behvarz].

1.1 Focus on health rather than just disease

A few interviewees described the policy as 'health dominant', an approach which used to be less apparent:

"...the family doctor is not in charge of his patients' diseases, s/he is responsible for keeping the population healthy. As head of a health team, s/he must keep and promote his/her assigned population's health..." [N12,PR, national policy maker].

This was why the family doctor was in charge of promoting health, rather than just treatment:

"...by law, insurance must be health dominant in this reform. Family doctors should provide health services, not curative ones!..." [N13,PU,senior insurance manager].

Most doctors were fairly aware of this approach, at least in theory:

"Family doctors must manage their population's both physical and emotional health by getting to know them over a long term, either by face or name. To be more successful, they must train people, not just treat them. For example I teach those of

my patients who have high blood pressure to exercise more, and take less salt in their diet, in addition to taking drugs..." [L2.4,FD,family doctor].

Such a situation became likely for family doctors working for long enough with the public to promote their health culture:

"...it is important that the family doctor lives with people (in villages), knows their problems, and thinks to solve them... e.g. he could change drug consumption and rationalize prescriptions..." [P4,provincial health manager].

Considering social aspects of health in FM was not only the policy-makers' desire, but the public were happy because their social life was being taken care of in FM, as well as their medical conditions:

"... I am looking forward to seeing the FD as my family member who knows me and my family, socializes with us, participates in our ceremonies, and keeps us informed about our health status, which makes us alert prior to developing a serious condition. We want him to live with us, drinking the water that we drink, eating the food that we eat,..., understanding us by putting his feet in our shoes..." [L5.8,imam].

Despite the policy being health dominant on paper, in practice the interviewees felt that treatment was given priority because of the way FM was implemented.

1.2 Improved efficiency

As the key function of resource management, gate-keeping was understood by practitioners. Many described FM as an opportunity for referral systems:

"...Behbar helps a lot. Many problems could be solved easier by a doctor or a midwife. They do not see specialists by their own and for no reason. The situation has therefore significantly improved ..." [L2.5,midwife].

With lack of distinction between concepts of referral, Behbar, and FM, some interviewees highlighted FM as the only medium to promote referral:

"...FM has not changed anything other than slightly empowering the referral system..." [L2.6,midwife].

Specialists in policy making roles believed that most situations could be managed by GPs and family doctors:

“...If FM is rightly established, we do not need the current number of specialists and sub-specialists...” [P3,GMU,senior provincial health manager].

FM was mentioned as a programme that takes barriers between providers and users away and is associated with better coordination:

“... call it FM or whatever. I passionately believe in this phenomenon because of one crucial fact: it eliminates the distance between providers and users of services...” [N17,PR,national health expert].

Improved coordination resulted from a defined and systematic relationship between providers and users in FM:

“...when the system connects individuals to each other, the user is aware of what services s/he is entitled to, and the provider knows the registered person, because of which the veil which prohibited them from regular visits is lifted...” [P4,provincial health manager].

Prospective medical record keeping in FM was seen as another sign of better coordination:

“...medical record keeping links doctors systematically to their patients. Being professionally prepared, the records are easily accessible upon visiting another doctor... we must change random and non-registered visits between doctor and patient to a recorded one...” [N17,PR,senior health expert].

The advantage was also acknowledged at local levels:

“...not only doctors, but also Behvarzes ought to register their patients' medical records, particularly for target groups like under-fives or pregnant women. This is essential for future work up...” [L2.2,DA,district health expert].

1.3 Improved quality of care

Accessibility, coordination, availability, and equity of services as components of quality of care were felt to be improved in FM. Some interviewees explained that FM brought clearer responsibility within the health system:

“...we registered people and responded to their needs via raising responsibility of the system. Responsibility is not achieved without an assigned population, as well as assigned persons in charge of service provision (FM)...no one previously knew who was in charge of what...” [N14,PR,former senior health official].

Providers called this as getting back on track by integrating care:

"...FM is systematizing the provision of health services. In my opinion, it frames the system which was very messy beforehand..." [L2.6,midwife].

The policy also was seen as creating more coordinated care:

"The patient is viewed telescopically at the specialist level. For instance, the doctor cares only about the patient's diabetes, not his heart problems...only a family doctor could coordinates different problems." [N12,PR,senior health official].

The family doctor's role as the dispatcher or the coordinator, particularly for elderly and high risk populations, was highlighted by many as the major reason for supporting FM.

Perhaps this was why the public interpreted the policy as grounds for active care:

"...once I heard of FM, I imagined how wonderful it would be. I think it would be like in movies, where doctors visit patients at their homes ..." [L1.4,midwife].

FM was also explained as a programme for all people that reemphasizes equity:

"...by law, it is the government's responsibility to provide FM packages for the entire population. Every Iranian citizen has to have a family doctor..." [N3,MP,physician & member of parliament].

As another emphasis on equity, provision of services for all Iranians via FM, irrespective of their socio-economic or monetary status, was the mandatory duty of the government.

Practitioners also acknowledged their increased accessibility to the public:

"...we are more in charge of the population's health (via FM), because we know them better. We are so close to the public now." [L1.4,midwife].

The benefit was echoed by a few Behvarzes who had been in charge of serving people for more than a decade. As locals who have been living closely with the public, it was important that Behvarzes acknowledged FM as an opportunity for a closer relationship. At least, it was expected to have this level of relationship between providers and users, in addition to the general strong belief among providers as well as the public:

"...when the doctor comes to the village, households recognize him as their doctor..., they go to see him more easily ..." [L1.6,behvarz].

Some were so hopeful in FM as to describe it as the most equitable model of primary care:

"...although the system is not perfect in England, however, because people are not rejected due to monetary reasons, access is fairer...despite shortages in the British (primary care) system, its medical recording system makes follow ups more likely ..." [N9,PR,O,senior national policy maker].

Exemplifying the British primary care model by this high-ranked policy maker who was fully aware of both (Iran and UK), highlighted hope in FM to increase equity, particularly in deprived areas:

"Taking into account our provincial demographics, the design (of FM) is absolutely in line with the deprivation, despite difficulties in execution..." [P5,E,provincial union member and physician].

Some interviewees mentioned FM as the only way to expand availability and accessibility of services and make them equitable:

"...FM is the only framework in which doctors become available and accessible. There is no other way around..." [N1,PR,former senior health official].

This opinion which was mirrored by practitioners other than doctors:

"Although doctors do not perform well on some occasions, however, the main aim of FM which was increasing doctors' accessibility is being fulfilled. Now, the majority of people do not give birth at homes anymore. They know there is a FM system to support them. They are happier and more at ease..." [L1.4,midwife].

1.4 More confidence in doctors

Undoubtedly, the implementation of FM had been going forward by creating mutual opportunities for practitioners and the public to establish long-term relationship on the basis of trust and confidence. More confidence in doctors was identified:

"...a level of confidence has been created because of which it is unlikely that they go to visit another doctor (even at this centre [with three other doctors]). They get upset if I ask them (patients) to see other doctors while I am busy..." [L2.3,FD,family doctor].

The current level of close relationships had been achieved not only because of the long-term stay of family doctors, but also the nature of doctors' duties and responsibilities:

"...FM is good because the doctor knows his patients well, ..., he does not ignore patients and follows them up, doctors are more involved now...they enforce behvarzes to take care of specific cases..." [L2.6,midwife].

Simultaneous prioritization of issues such as maternal mortality in Golestan province was interpreted as raising sensitivity towards patients, which enhanced follow ups as well as responsibility to the public:

"...I think FM has increased the number of follow ups, because doctors are more sensitive now, they discuss high risk cases among themselves..." [L2.7,local dentist].

That was why people at some places preferred to visit family doctors rather than seeking care from private doctors:

"Since FM started, I prefer to come here (the health centre) just because of follow ups (here). They follow up pretty well. They care so much." [L2.8,Imam].

FM created the opportunity for a close and defined relationship between practitioners and the public, in order to provide good services and good management of resources:

"...private doctors do not keep their patients' records to follow them up. They know their patients just by name, not their problem. To what extent can one who visits thousands of insured people (as just part of his patients), rely on his memory? ..." [P2,PU,provincial policy maker].

1.5 Concurrent implementation of FM and Behbar (rural insurance for all)

It was difficult to assess mutual interaction of the two policies, however, for two reasons the concurrence was interpreted as an opportunity for FM: the concept of the purchaser-provider split and expanded service provision.

The purchaser-provider split was identified as essential for undertaking the implementation. Bearing in mind the budget deficit, the MOH was more likely to allocate FM resources to remedy these inherited shortages:

"...given our long-run budget deficit, if money was under our control, we were definitely doing something else. We rank hospitals ourselves across the medical university. I never rank hospital X (the oldest educational hospital in the capital of Golestan) a third class one, however, it really is. Using whatever technique, I rank it first class, to charge clients in first class rate. If the MIO was in charge of ranking, it

certainly was not evaluating us better than 3rd class...thus, if I was going to monitor our performance, I was interpreting results for my own good at many occasions ..."
[P3,PR,senior provincial health manager].

The purchaser also identified the split as necessary:

"...we could not accept that one organization (MOH) to determine the price, as well as sales and also purchases (services) by itself, while enforcing others to purchase only its services. Given that, separation was prosperous..." [P2,PU,provincial manager].

It was believed that the split would enhance efficiency and quality of services:

"...parliament as the fund approver has instructed the MOH to make policies, which must be followed by the MIO...in fact, defining policies, designing health packages, and providing checklists are MOH's tasks. The MIO is supposed to monitor the performance on the basis of policies and the MOH provides the checklists. These two are complimentary, rather than independent and interfering units..."
[N3,MP,physician,member of parliament].

Nevertheless, national stakeholders other than the Ministry of Welfare and Social Security were concerned that FM would be ruined by the MIO, because of their lack of a health focus:

"...there is always the danger that one day the MIO will ruin the reform. Having monetary control, particularly as long as the organization is chaired by people like the current minister (who has said we are not in charge of public health), it is quite likely that they do not take responsibility for health, stating they are just the insurer, and no more. I fear them saying that whenever insured people get sick, they will be responding accordingly. Such a situation would be a huge disaster for FM..."
[N1,PR,former senior health official].

The extent that concurrence promoted FM was unclear, given the principal disagreement of the MIO with FM:

"...the programme was executed by an insurer (MIO) which was principally against FM from the beginning, while principal designers of FM had been put aside ..."
[N8,O,senior finance official].

One interviewee assessed the concurrence implementation as a potential threat to FM, because of shifting emphasis from prevention to treatment:

"...we enjoyed Behabr as an opportunity to lead our health system towards FM and referral. Meanwhile we were concerned about losing our past 27 years of achievements in primary health care by privatizing rural insurance, which could

potentially shift focus of systems from health to treatment ...” [N12,PR,senior health official].

Suspicious about different aspects of implementation, this case was negative towards concurrence:

“...implementing Behbar destroys the concept of FM, because doctors are temporary ones who work in mandatory conditions. Contrary to the principle of FM, It is also run publicly...” [N13,PU,senior insurance manager].

He considered himself as the person who started FM in Iran. He was pessimistic about all aspects of the current format of implementation and negative even towards points the majority had welcomed. Accusing current managers of incapability, he believed the German primary care system as the only suitable option for Iran, insisting every one else was wrong.

Irrespective of a desirable approach to the purchaser-provider split, the study revealed a few practical consequences of the split that will be discussed in coming chapters.

Because of the Behbar and the simultaneous equipping of health centres, provision of health services was expanded. This led to a considerable rise in service utilization. Such an improvement was highlighted as the main benefit of concurrent implementation:

“...enjoying Behbar, we settled doctors in 2500 rural health centres, activated health centres and enhanced the public's trust. Utilization of services has dramatically gone up to 10 times ...” [N10,PR,PU,national policy maker].

It was not surprising therefore that key central policy-makers branded the implementation as only delivering some services to deprived people, hesitating to call it either FM or Behbar:

“...we built up pillars of FM whose base is still underground. 500billionTM was spent for people who were deprived from any services. Even if nothing happened, accessibility has increased which itself causes less death. Nevertheless, it is neither FM nor rural insurance...” [N14,PR,former senior health official].

Increased service delivery was seen as the main achievement of implementation thus far:

“...the way of implementation has inevitably increased service provision. We introduced 390 (currently 270) drugs, accommodated family doctors in villages, established pharmacies, created 24 hours services including radiology units and laboratories...” [N4,O,senior policy maker].

Irrespective of the extent to which the current implementation was consistent with the policy, some believed it was better than nothing:

"I would like to reemphasize that Behbar is absolutely rational, even though far away from our goal (what is that?). Taking one step is sometimes better than no movement at all" [P3,PR,senior provincial health official].

1.6 Expanded entitlement

At the local level, interviewees acknowledged over-utilization of services because of expanded entitlement provided by Behbar:

"...because of FM, pregnant women do not commute any more. This was not possible beforehand, because we only had one doctor. But there are currently several doctors in 2-3 health teams to cover such cases, which have improved our maternal mortality..." [L1.1,DA,district health manager in Golestan].

Behbar removed barriers to utilization of services and made them more accessible, partly because of significant reductions in user fees:

"...people visit doctors with greater ease and less cost these days. Ultrasound imaging is almost half price in FM. They can afford to visit specialists much easier now. If there was no insurance, they were not going to seek specialist care for pregnancy checkups. Behbar is very good in this regard..." [L2.5,midwife].

1.7 Better employment opportunities

Implementation of FM created an opportunity for the MOH to recruit almost 6000 GPs and 3000 midwives in rural areas nationwide. Such a chance was consistently acknowledged as attracting practitioners towards the reform, particularly from the private sector:

"...a huge number of doctors and midwives got employed in this reform. Job creation has been our priority all the time..." [N14,PR,former senior policy maker].

Unemployment had been a serious problem for doctors and midwives in Iran for long. Rise in employment was the main reason for many to support the reform:

"...we had 10,000 unemployed personnel including doctors, nurses, and midwives with disproportionate distribution across the nation...we created 8000 jobs via this programme for GPs and midwives... providing a platform for doctors to act on was one of the philosophies behind FM ..." [N16,PU,former insurance official].

Implementation of FM responded to the problem, particularly by recruiting midwives, who used to be almost absent in the PHC:

"...almost 5000 GPs and 3000 midwives were settled in rural areas, their number has not been more than 1800 ever. This means accessibility and availability of service providers has raised four times..." [N1,PR,former senior policy maker].

Increasing employment was the dominant reason for many practitioners to support FM:

"...the employment opportunity that FM created was the most important factor which facilitated its implementation, ...in fact many doctors could not run their own clinics...Without FM many doctors would be jobless...me too, without FM I must have been fired after my mandatory scheme..." [L1.4,midwife].

1.8 Increased pay for practitioners

A substantial increase in service providers' earnings because of FM, particularly for doctors was a great incentive:

"... Increased payment highly influenced practitioners. Insignificant income differences were the main reason that doctors were not pleased to settle in small or remote cities. We encouraged them by financial incentives..." [N3,physician,MP,member of parliament].

The majority of policy makers believed that a rise in pay for practitioners, increased their reputation in the society and motivated them:

"...this programme (FM) has raised the doctors' glory. They have 1.5millionTM income, whereas it used to be 300,000TM. It is not high, but it is enough to encourage moving to rural parts..." [N4,PR,member of national team for reform].

Therefore, FM was introduced to change the doctors' position, whose reputation had been damaged by low earnings:

"...doctors found their lost honour because of this reform. Now, they can at least stand on their own to live. It is not like the past, when they needed to take loans to work, went to prison if they could not repay their instalments or had to beg for money!..." [N15,PU,senior insurance manager].

Increased income was almost always highlighted as the greatest incentive to work in deprived areas:

“...doctors are paid more than 1.5millionTM (monthly), whereas, the average payments used to be 200-300 thousandTM. Even though that salary is not that much for FDs who have moved to remote villages, it compensated many factors for doctors to join the programme...” [N4,PR,senior national policy maker].

Senior policy makers claimed that such a rise has also remedied doctors' dignity:

“...doctors in rural areas were paid 200,000TM prior to FM, whereas, they currently earn up to millions...we realistically modified payment mechanisms. They used to be jobless or get paid 100,000TM. Now, they have found their dignity...” [N14,PR,former senior health official].

Practitioners' income rise was cited as the most important reason to join the reform, particularly at the early stages:

“...in FM I am not doing anything more than what I was doing before. I just wanted to be a FD because of its 1millionTM salary...” [L1.5,FD,family doctor].

Provincial and district managers also saw the rise as contributing to better managerial performance:

“I used to get paid 200,000TM, while now the minimum payment is 900,000TM, ... keep this confidential: many doctors joined us with absolutely no idea about FM. Perhaps they found it attractive to make money. ...doctors used to cover remote areas with too many troubles. Now they work 8.00 am – 4.00 pm, while they visit several health houses. They do all of these because we pay them up to 1,200,000TM...” [L2.1,DA,district health manager].

Nonetheless, increased income was not encouraging enough for some doctors. Comparing their income to the past, they were happy in the beginning. However, soon after that they realized the workload had increased and there were delays in payments, they lost their faith in the reform and became less interested to stay:

“...for a short period of time I was happy because of this salary, but it does not meet my expectations any more, particularly because I can earn much higher with less stress elsewhere...” [L1.2,FD,family doctor].

In contrast, one doctor assessed the payment level high for the duties that they were carrying out:

“...this money is too high...I think around 400,000TM is fair...no one hates money, though I am concerned that this leads to doctors' diversion from their medical role

.... If I was a decision maker, I would have decreased the salary and would have tried to increase the doctors' dignity and respect..." [L2.4,FD,family doctor].

Although this interviewee was trying to highlight his sadness regarding the relationship between practitioners and administrators, he accepted the rise in payment was the strongest motivator for doctors. He was from a wealthy family, with no financial problems. Trying to show his fury because of the executive challenges, he highlighted that he was prepared to get paid less, if moral issues were considered.

1.9 New forms of payment

Pay for performance (P4P) and capitation payment were identified as two positive aspects of the policy:

"...we designed a mixed payment mechanism on the basis of practitioners' performance and capitation. For instance, if they cure ten patients, they are paid 10 K, otherwise no money ..." [N14,PR,former senior policy maker].

It was expected that such methods would encourage health promotion rather than treatment:

"...we have been trying to drive towards health in all aspects, including the payment system..." [N12,PR,senior health official].

Peripheral managers gave a number of examples to illustrate positive impacts of P4P on practitioners' behaviour:

"...we apply the results of checklists' analysis in payment. If not satisfactory, the practitioner is granted one more chance for compensation. Otherwise, his contract will be suspended. This has really affected the system...managers know that part of their earning depends on their scores in the audit pyramid (the format of auditing performance in Golestan)..." [P1,PR,provincial senior health manager].

Most practitioners were conceptually happy with such innovations in payment, however, Some were concerned about its implementation:

"...it is good that we get paid according to our performance. It doesn't scare me that a part of my salary is linked to my function. Appropriate monitoring motivates me. This has caused me to act better, even mandatory! ... I know that to get my money in full, I have to cover different villages and sign documents..." [L1.4,midwife].

Nonetheless, few practitioners complained that in reality they were paid the amount that their boss decided, not based on their performance:

"...everyone knows that whoever X (head of district PEHP) fancies, get paid better. Everything is in his hand...I never understood why my income in April, was more than May, or May was less than June, while just one audit was conducted for all three months. There is no rationale for payment ..." [L2.4,FD,family doctor].

Capitation payment was also described as a method to make doctors responsible for their assigned population:

"...the biggest disaster would be fixed payment to doctors, not on the basis of particular formulation...note that the doctor is paid against the number of registered population, not the public's sickness. This means that s/he is responsible for health of the public. The formulation itself has considered bonus for managing special diseases like diabetes and hypertension, instead of deductions for mismanagement of such targets..." [N1,PR,former senior manager].

It was claimed that capitation payment might motivate practitioners to enhance the quality of their performance by realizing that better work would be paid more:

"...we had experienced fixed salary payment, within which sweet and bitter was not different. Capitation payment teaches doctors that quality of services shows itself in payment..." [N17,PR,senior health expert].

1.10 Following experience in other countries

A number of reasons were identified for the strong belief in the policy. Some called FM the international accepted method for reengineering the health system:

"...I conducted a research to find out which way other countries have gone (to change their health system). FM is an accepted universal policy! ..." [N15,PU,senior insurance manager].

Senior policy makers' observation of implementing FM successfully in other countries affected their support for the policy:

"...I have studied many health sector reforms in different countries to find out an appropriate replacement for our system. I learned that FM has been successfully employed in all places..." [N11,PR,senior health manager].

However, only two national policy-makers were aware of the origin of the current model of FM:

"...attempting to define FM, we knew that it must be professionally managed, be performed on standard (criteria), and be responsible before clients. We therefore chose the Dawson model for referral, which is completely regulated on the basis of delivering services among an assigned population. According to the model, patients' movement in various levels of services is concentrated on primary prevention, like England, Canada, etc,..." [N16,PU,former insurance manager].

In addition, some interviewees mentioned adopting role models including the British primary care to design the policy:

"...FM in its modern format is matched with experience of many countries, particularly England, which we studied rigorously..." [N3,MP,member of parliament].

Even though efforts to adopt the British primary care system for Iran was commented on, few interviewees were keen to acknowledge it, either because of wanting to call FM a home product, or other reasons:

"...I do not like the British primary care system. People are not satisfied there! We had Nordic countries such as Sweden in mind or Australia ..." [N1,PR,former senior health official].

"... the Iranian FM system is not a copy from Britain. They have designed that system on the basis of households and geography (we have not done so)" [N4,PR,senior policy maker].

Nevertheless, one interviewee criticized the policy because of its lack of collaboration with international experts and organizations:

"...perhaps, we should have had foreign consultants in this implementation. We must have asked some advice on both design and performance phases. When implementing a big policy, it's common to also assign a foreign consultant ..." [N16,PU,former senior insurance manager].

Employing consultants with no conflict of interest could have also provided a neutral evaluation of implementation, currently being undertaken by the implementers (MOH & MIO) themselves, which are not even recognized by the other.

2 Criticisms of the policy

2.1 Top-down approach

There was a consistent belief that the process of policy making was top-down, with low participation by key stakeholders:

"...I wonder is a real reform being undertaken in this country? To conduct an effective reform, all players must be identified first. Playing the appropriate role according to their influence is also essential. Otherwise, restricting the reform to few people who just talk to themselves and only write their wish list down, ends up with the messy picture you currently see..." [N7,O,senior insurance manager].

There were negative effects for such a top-down approach, such as influential stakeholders not accepting the policy:

"First of all, the programme (FM) has been implemented without consultation with (professional) medical unions such as the IMA or the GPA, which makes it valueless and unreliable..." [N6,O,senior union manager].

Similar to any top-down policy, individuals did not consider themselves embedded enough into it, which led to loss of motivation, lack of ownership and poor cooperation:

"...we have influential stakeholders such as the IMA and chancellors of universities, whom were not taken into the cycle of policy (for FM). Many opposed the reform because of its inherent rationing essence that restricts their earning and freedom. Our approach in saving the benefits of the MIO and not providing other incentives such as welfare and money for individual was mechanical..." [N8,O,policy maker].

Stakeholder analysis prior to design FM was overlooked to save money. Not only were the key stakeholders ignored, but practitioners who were traditionally considered as obedient, were also not consulted:

"... traditionally, only patients are considered clients in this country. Whereas, because practitioners induce behaviour, create cost and define protocols, they must be considered as the main clients. You have got to keep them satisfied. Stakeholder analysis must have been carried before this..." [N9,O,senior policy maker].

He predicted that forcing practitioners to carry out some activities would have induced demands from patients, which would inevitably escalate costs:

"...we have to do what we are instructed to, because we are just performers. If we disagree, we will be replaced by someone else. Senior managers had to implement FM at whatever price to keep their position. We just pushed subordinates and did not give them any chance to have their say..." [N5,PU,senior insurance manager].

The top-down approach is continuing despite the key policy makers' desire to involve stakeholders:

"...we had decided to ask doctors to meet with trustees like elderly and people who are culturally or politically influential..." [N14,PR,senior former health official].

However, practitioners were not consulted by this highly influential policy maker.

Practitioners felt their dignity under threat and lost their sense of ownership due to the top-down approach:

"The only thing we know from FM is expecting a new version (of policy)...we did not know what was going to happen until it started. I am still confused about what is going on. We are not counted as human beings ..." [L1.3,nurse].

On the other hand, being independent from tax payers' money was assessed as positive to impose the policy on the public:

"...our monetary independence (from people) in Behbar was a reason for success. By giving something free to people, you could expect recipients to do whatever you desire. Otherwise, they want to have their say..." [P2,PU,senior provincial manager].

This was relevant because as people paid almost nothing to get services, rationing their behaviour was easier.

2.2 Lack of sustainable funds

Nature of financial resources for implementation that was subsidizing the services, rather than insurance, led to general concerns regarding the sustainability of funds for the reform:

"...we must have designed a real insurance rather than support when we formulated this policy (FM)..." [N3,MP,member of parliament].

The financial basis of the reform was weak, and contrary to the policy:

"...In fact, subsidizing 70% of health costs while the public takes no risk is support not insurance. This is one step closer to health promotion, but is not insurance..." [N12,PR,senior health official].

Stakeholders even from outside the health system were concerned about the fragile nature of funding, so-called insurance in Behbar:

"Do other countries manage insurance as ours? We feel inferior being insured here. The approach to insurance in this reform is shameful. They look down on people. Unless it improves, no reform succeeds..." [P6,O,senior union manager].

The current framework of funding the implementation (supporting by global money rather than the insured's contribution), resulted in looking at the reform as just an expansion of service provision for villagers not FM:

"...the insured person pays no premium in Behbar. Everything is free, except the insurance log-book issuance. I think they (MOH) just want to provide easier curative services (not preventive and promoting health) for villagers... Behabr was designed to support the poor against disease...the principle of FM and referral is being bypassed by Behbar..." [L2.1,DA,district health manager].

Furthermore, many were concerned that lack of rationale and calculation behind the budget would endanger its sustainability:

"...Parliament approved this budget with no idea about the needed amount... there was no calculation for that. MPs diverted money from whatever source in the annual budget bill, with no logic or reason. What worries me is that big money is always badly spent ..." [N8,O,senior national manager and policy maker].

No appropriate socio-economic ranking and scientific rationing were undertaken to approve the budget. Therefore, the insurance log-books were distributed only on the basis of geographic place of residence:

"...you cannot allocate part of the tax to a certain part of the population, without socio-economic ranking...what kind of reform is this? Not even exclude villagers who reside in cities (affluent), while they have kept their houses in villages. This is just geographic coverage not insurance..." [P1,provincial health manager],

Last but not least, interviewees even at local level were concerned that contrary to the 4th programme for development, the government was the main financer in FM:

"...as far as I have learned, insurance pools must mainly be fed by the insured's contribution. Insurers become powerful because of this. Governments occasionally contribute to the pools. However, the system is paradoxical and very complicated, paying and monitoring by the government (itself)..." [P1,PR provincial health manager].

2.3 Ambiguity

Some felt that FM had not been well documented and clearly drafted:

"I suppose that the policy has not been approved as a clear document. We worked hard to define FM, however, we did not produce an understandable and transferable draft as the national constitution (for the reform)..." [N4,PR,senior policy maker].

Even the few existing documents which explained the policy and demonstrated its aims and operational steps were branded as vague and misleading:

"...we were not able to appropriately transfer the policy to practitioners. Because they do not know the principles of the policy, they are struggling with many vague and obscure problems..." [N10,PR,member of national team for reform].

Many practical shortages were linked to the lack of written documents to express aims and expectations in FM:

"...implementation started prior to drafting of the policy. We were not even told what we were expected to do. We were never told about FM! Our personal interpretation from the 4th plan (for development of Iran) was implementation on the basis of FM. Shortages were therefore inevitable ..." [N15,PU,senior insurance manager].

In Golestan, the policy draft was not appropriately distributed among practitioners across the eleven district health authorities, and those who had access to the draft described it as unclear, leading to confusion and misunderstanding:

"...the policy itself is confusing despite all efforts for its design. Sometimes it is not understandable for doctors, because we have not considered that the doctor is a doctor. Coming from a different background, he is not necessarily familiar with managerial concepts ..." [N17,PR,national policy maker].

People in charge of implementing the policy including regional managers, identified particular parts such as financial articles as problematic:

“...the policy draft is very long and sophisticated, especially in its monetary sections. I have read it four times myself, have highlighted some parts, and am still struggling with some parts... sometimes detailed issues are described too much, whereas macro parts are left ignorantly behind...” [P1,PR,provincial manager].

Some parts of the policy draft led to users' confusion:

“...I wish I had a short, brief and practical pocket manual instead of this (huge) misleading draft...” [P4,provincial health manager].

“(laughing) if you are not among the writers of the draft, it is not clear enough to prevent misinterpretations...finding a contradictory section is common in the policy...” [L2.1,DA,district health manager].

Some mentioned the lack of flexibility as the reason for the ambiguity:

“...Although a policy must be comprehensive, it should be flexible enough to handle individual circumstances...” [P1,PR,provincial health manager].

The majority of doctors thought the green books were confusing, though the Golestan university folder was described as more useful (if they had access to):

“...the green books were absolutely confusing; the folder (expectations) was not too bad...” [L2.3,FD,doctor].

The unclear position of the nurse as an important practitioner to fulfil the aims of FM was one of the ambiguous aspects of the policy. This was even addressed by representatives of other unions:

“...No nurse or Behyar (lay people who work as nurse assistants) has been considered in this reform. Nursing duties have been handed over to midwives, who are simultaneously in charge of critical issues such as pregnancy care, mother and child health, etc,...” [N6,O,national union manager and policy maker].

The policy was confusing in this regard. While nurses were considered necessary, the policy was silent in branding nurses as members of the health team. There was no budget for recruiting them, except in centres with more than 8000 population. Across the six visited health centres, I witnessed patchy recruitment of nurses, apparently being paid not directly through the budget of FM, but other sources of DOH so-called Article 88. In some centres the midwife was in charge of nursing duties. Presence of nurses in centres was mysterious and unsustainable. There was one centre in a very deprived area with a 24-hour resident nurse, whose earning was three fold that of other nurses across the

province, due to geopolitical specification of that centre bordering a neighbouring country. As FM did not pay nurses, they did not consider themselves as part of the health teams. The fact that the majority of centres had funded nurses from sources other than FM indicated the necessity of nurses as members of health teams, emphasized by managers:

"...in our centre, the midwife carries out the pharmacy job... A FD needs a nurse on his side for sure...article 88 is for immigrant Afghanis in Iran with less benefits, not nurses whose role is essential in FM..." [L6.3,FD,doctor].

2.4 Lack of clarity of responsibilities

There were several concerns about practitioners' responsibilities, particularly doctors. First, shortages in definition of expectations, duties, and responsibilities for family doctors were addressed:

"...to manage health networks, the (family) doctor must know what he, as well as specialists and para-medics are expected to do. He must therefore get familiar with the PHC structure and referral grading ..." [N1,PR,former senior manager].

More generally, intra and inter-organizational relationships were not defined. A number of day to day matters such as legal aspects were also not drafted:

"...many things have not been predicted in the policy. Time-off, holiday, pension, etc, for instance..." [P1,PR,provincial health manager].

Some branded the services flawed because of obscure responsibilities, which might endanger patients' lives:

"...as a district manager, I have seen a few crucial occasions which the policy is silent. For example, in health centres with no ambulances, patients are advised to go to the hospital on their own (sometimes 40 minutes away). If the patient dies on his way to the hospital, as in pregnancy urgent cases, the policy does not explain what the doctor is supposed to do" [L2.1,DA,district health manager].

If a doctor accompanied the patient for humanitarian reasons, while other emergency cases attended the centre, s/he would have been penalized. This was particularly likely during night shifts in single-handed clinics.

Lack of clarity of the practitioners' duties and responsibilities were branded a recipe for failure. The first concern was that assigned duties for family doctors were inappropriate:

"...we have faced family doctors with a number of strange duties. They are expected to undertake public health activities, complete health records and refer patients to specialists, while they must check bakeries' sanitation..."
[N5,PU,national insurance policy maker].

The high load of responsibilities was because of either managerial or socio-environmental assignments for family doctors, both of which had pros and cons. Some believed that family doctors were being exploited via duties which were interfering with other managerial levels, mainly district health authorities:

"...there is a mix up between provincial and district health authorities from one side, and family doctors from another. I believe this interference is solvable by handling all sanitary duties to family doctors and paying them extra for these. The current situation in which doctors are paid a certain amount of money to visit patients, control wells, as well as bakeries and grocery stores' sanitation with no extra incentive is obviously exploitation..." [N5,PU,member of national team for reform].

Doctors themselves had a mixed feeling regarding their non-clinical duties. Complaining about the high load of such responsibilities, some did not hide the positive impact for the public:

"... (people) look at us like someone beyond just prescription, as experts who care for their treatment and other tasks such as school health. They treat us as one of them ..." [L1.2,FD,family doctor].

Representatives of the public seemed happier because of the doctors' engagement in social duties, whereas some doctors branded it irrelevant, difficult, and not in the public's benefit:

"...If I have to check toilets, what is the environmental health expert's role then? Do you think a doctor is capable enough to do all of these (duties)? Currently, people listen to doctors less than others. Moreover, we have not been trained to do this. .. this is clearly doctors' exploitation by the MOH which is not in public good..."
[L2.4,FD,family doctor].

In addition, midwives were forced to undertake duties such as nursing or pharmacy assistance that were irrelevant to their expertise:

"...midwives are forced to conduct nursing duties such as injections, however they do not possess the expertise that of a nurse..." [L1.1,DA,district health manager].

Nurses obliged to this, accusing midwives' lack of expertise to carry out the job:

"...a midwife is doing injections and wounds dressing here. Does she have the needed expertise..." [L1.3,Nurse].

Managers also faced many objections from midwives regarding this:

"The policy states that in centres with less than 8000 population, nursing and pharmacy services must be provided by midwives. Midwives objected to this because of interferes with their main responsibilities such as looking after pregnant women ..." [L2.1,DA,district health manager].

2.5 Policy too flexible

Interviewees at all levels strongly challenged frequent and quick changes to the policy. Although they acknowledged that peripheral feedbacks were the main reason for change, given the complex structure of the policy, several revisions led to confusion and inconvenience. Indeed, a few interviewees interpreted change as a sign of a wrong policy, as well as the implementers' incapability:

"...I think we must avoid endangering this national programme (FM) because of our failures. In response to objections, we should accept our mistakes and show our willingness for improvement. Having abandoned version 7.1 (versions of the policy), version 7.3 is on the way. Our managers are confused because of being forced to implement new versions, while the old ones have not yet been circulated and implemented..." [N5,PU,senior insurance manager].

Regional managers, who considered revisions as a sign of dynamism to quickly respond to the requirements, were also confused and unhappy:

"...seldom you find a province with no complaint regarding numerous versions which are sent through precipitate, when you have no idea in which direction you must work in..." [P4,provincial health manager].

Given the lack of explanation to managers and practitioners about the policy, implementation became more difficult because of changes. Policy makers were also accused of lack of awareness about the public needs prior to making the policy:

" Versions are my nightmare. While I am still reading the recent one, a new version is announced, and probably a newer one is on its way..." [L2.1,DA,district health manager].

"...in the last 6-7 months, six versions have come through. I guess they will be adding an insult to doctors in the new version!" [L2.4,FD,family doctor].

2.6 Lack of local customization

One key policy maker mentioned some degree of provincial customization:

"...there were six of us (national policy makers) alongside local managers, each in charge of specific regions of the country to revise the policy based on regional needs ..." [N1,PR,former senior policy maker],

The need for local tailoring was strongly emphasized, particularly within a diverse province of Golestan:

"...answering needs must be consistent with recipients' level. This is why we must categorize villages ... one universal pattern does not work in a diverse area with different regional requirements..." [P9,O,provincial top authority].

Because of the lack of customization, some assumed that the policy is a foreign model with no adoption:

"...foreign patterns have no position in this country. Ever thing must be evaluated with its background here..." [N7,O,national insurance policy maker].

Provincial managers pointed to the lack of customization with more practical examples such as drug lists, which showed the operational difficulties more clearly:

"...they (MOH) must allow us to assess and decide to include or exclude some items from drug lists on the basis of our provincial problems..." [P1,PR,provincial health manager].

Given differences in the prevalence and pattern of diseases across the country, the problem was a common complaint by provincial managers:

"...allocating same drug items for all provinces is absolutely irrational. Each province must have a separate list...e.g. we are the second prevalent TB province in Iran. Why should we have the same item and per capita amount for anti-TB drugs as province X, which is almost TB free..." [P4,provincial health manager].

To sum up, lack of customization was the main reason for the patchy implementation across provinces:

"Ardebil, East Azerbaijan, and Gilan have implemented (FM) very well, whereas Hormozgan as well as Sistan & Balochestan have implemented very badly..." [N11,PR,senior health manager].

The above ranking was partly verified once the MOH and the MIO announced the best (but not worst) FM implementer provinces in 2006.

2.7 Lack of realism

Policy making in Iran was mentioned as being conducted on the basis of ideal goals, rather than on realism:

“...our rules are actually very good, though problematic once they are executed. Rules must not state our ideals, that is the constitution’s job. Our operational rules are highly idealistic, with the lack of a roadmap to pass the way from A to B...”
[N7,O,senior insurance policy maker].

Plans either were being abandoned or people were losing their faith in them, due to which the public and doctors lost confidence both in the plans and its implementers:

“...our capitation payment for health is \$150, whereas, it is \$2000 in Europe. Is not it ridiculous that we are expected to provide the European standard services with this little money?... Provide people basic needs first, instead of promising unreal welfare. Be honest with people, rather than promoting unreal mottos, which people soon realize are fake and lose their trust in us ...” [N14,PR,senior policy maker].

The problem was echoed by local staff:

“Our policies, including this (FM) are mainly beautiful talks rather than reality. Some people, including many doctors get paid to write down wonderful things, which are just rubbish in reality... the minority who are mental retards sit on upper chairs in Iran, making decisions for the intelligent majority...” [L2.4,FD,family doctor].

One recent example of making uncultivable promises was the MIO’s decision to pay specialists in Golestan 15% extra against providing feedbacks for family doctors.

Unfulfilling the promise despite ample resources, resulted in a severe lack of trust at the time that specialists’ support was crucial to promote the reform:

“...the MIO wrote to us that we get paid 15% on the top up routine, by writing down our feedback (for family doctors). They have not even paid one case. We do not trust them anymore....” [P5,O,provincial union and physician].

2.8 Lack of attention to human resources

Two interviewees pointed to a fundamental character of Iran, which was constitutional enough to affect any policy including FM. Human resources have not been considered a key element for development in Iran:

"...in our country humans have not been recognized as pillars for development, due to which we have paid much attention to build up of properties, rather than mentoring our human resources..." [N14,PR,former senior policy maker].

The problem was described as too much attention to hardware while human resources as software of the system were ignored:

"Our main anti-progressing problem is executing plans prior to crystal clear clarification of the goals. Worse still, stakeholders unify around those vague goals....this is why a plan often forms with different aims in the implementers' minds. Stakeholders are around just to fulfil their own goals, mostly contradictory to others...we do not have serious hardware problem, however our software difficulties are too many. We have got equipment, machineries, etc., with no proper software like managerial skills, leadership, efficacy, and appropriate employment of the facilities..." [N4,PR,national team for reform].

That was the main reason behind the senior managers' call for more investment in humans instead of equipment:

"...undoubtedly it was our legal responsibility and our personal belief to start the implementation (of FM). If only we could have started from equipping our human resources first, rather than our physical facilities..." [N12,PR,senior health policy maker].

2.9 Insufficient remuneration

Allocated capitation pay for FM was deemed insufficient to cover necessary expenses:

"... the MIO has credited us 11,000TM (£6) per capita per year. Calculating the cost of each visit, the prescription situation in which the public ask for too many drugs, administration fees, etc... this does not cover more than three visits a year. The MIO thinks wrongly that this is big money..." [P1,PR,provincial health manager].

Given the low per capita payment for health, there was also discrimination between rural and urban areas regarding the budget, allocating only half of the urban budget rate for rural inhabitants:

"...per capita for villagers is half of that of urban counterparts. It was 16,800TM which was almost 40% of the urban budget. The amount was raised to 22,000TM in 2006, 50% of that of urban residents...you know the rate of diseases in villages is not less than that of cities, if not more. This is inequity for sure..." [N15,PU,senior insurance manager].

Taking articles of payment in the policy act into consideration, interviewees were concerned about shortages in adjusting practitioners' earnings on the basis of all relevant factors. For example, they addressed the gap that FM created in income of administrative doctors in the DOH and family doctors in the periphery. The policy was also criticized for not providing enough incentives or significant and effective earning differences for doctors in deprived and affluent areas. As a result doctors did not want to stay in deprived areas:

"...some areas are very deprived. The difference of payment between inaccessible and affluent areas is not that encouraging. The highest amount we pay is 1,400,000TM for X (very deprived and hard-accessible area in south of Iran), while the salary for Y (not far away from X, but with daily flight to Tehran) is 1,200,000TM. Doctors have no motivation to stay in X..." [N4,PR,national team for reform].

Even though the deprivation index was based on socio-economic status and was defined in consultation with the locals, the lack of intra and inter adjustment factors was a concern of many interviewees:

"There is no earning justification, taking into account the distance between different centres and the capital, climate situation, live in facilities, etc. There is no bonus for doctors who act as centre managers as well..." [N6,O,national union manager].

This was why some experts called for adjustments and revision in payments according to variables such as the inflation rate, to keep in line with the purpose of the reform:

"...Okay, doctors get paid up to 1 or 2millionTM. We must consider for what purpose this money is paid. The substitution rate must not be forgotten. He gets this money to pay his child's tuition fee for example. If such a fee increases every six months, it must be counted. There should be a flexible logic behind it...If you put the doctor under pressure, s/he is clever enough to compensate by doing other things through which the public would be the main loser..." [N17,PR,national policy maker].

Provincial managers complained a lot about difficulties they had to retain doctors in administrative positions within the DOH, because of their significant income gap with newcomer FDs:

"...the current system has created a problematic gap between the office and periphery. My administrative personnel prefer to move to the periphery and work as FDs. We try our best to convince them to stay and act as administrative doctors, by reminding them not to bring their reputation down because of money! However, we know they are right. Our administrative doctors who are more experienced, with greater work load and stress get paid less than a third of that of FDs..."
[P1,PR,provincial health manager].

However, with some advantages, provincial managers' main challenge was the significant difference in earning for doctors across Golestan health authorities, due to which they preferred to work in health centres, instead of keeping their stable chairs in the office:

"...all doctors prefer to work in health centres...however, work conditions in rural areas are much more difficult compared to the office. At the office, warm winter and cool summer is guaranteed and reputation is much higher. Nonetheless, the gap should not be this wide..." [P3,PR,provincial health manager].

Contrary to senior provincial managers' views, administrative doctors preferred to be transferred to health centres because of less stress and much better payment:

"...the bigger issue is increasing the gap between earnings rather than payments. Look, a doctor in administrative job is paid 300-40thousandTM, while by working at a health centre with less stress and work load, he is paid at least twice as much. The irony is that the head of the district health authority, part of whose job is supervising FDs, earns half or less than that of an FD in the periphery..."
[P4,provincial health manager].

In contrast to the policy to take doctors' experience into account for payment, only two factors were being counted in this regard: the number of the registered population and the deprivation index, which upset experienced doctors whose wage was no different from that of the doctors in the mandatory scheme:

"...it is a violation of the purpose to pay official and experienced doctors the same as the ones in their mandatory scheme..." [N17,PR,national manager].

Nonetheless, there were some very deprived centres where despite an attractive monetary package, no one was prepared to move and practice there. Therefore, recruiting doctors in the mandatory scheme seemed inevitable in those centres.

2.10 Unrealistic expectations

As mentioned in Chapter 4, registered people were entitled to utilize services by showing their insurance log-books issued by the MIO. As official proof of membership, the log-book itself was subject to controversial interpretations because of unrealistic expectations. Irrespective of its benefits as a voucher of entitlement, societal perception of Behbar log-books was the concern of many, particularly taking into account that the MIO, alongside a number of organizations like the SSO, have been issuing similar log-books for several decades. These are proof of entitlement as well as a prescription tool to utilize whatever services at wherever place, in contrast to FM: based on rationalizing utilization. Issuance of log-books in a similar shape and form to other insurance schemes caused many challenges. Some people and their representative MPs, accused FM of reducing their freedom. People asked for the same freedom to visit any doctor, or to be admitted into whatever hospital they prefer, similar to the owners of log-books other than Behbar. It was a difficult period when the implementers were arguing with MPs not to suspend the entire implementation because of the public's dissatisfaction when comparing log-books like the SSO to Behbar, and asking for absolute freedom of utilization, plus free prescription and hospital admission:

"...in areas where people have or have had SSO log-books, villagers asked to visit wherever they want with no obligation, objecting to our expectation for rationing, while they must pay 10-30% as franchise. (They tell me) your log-book is worthless. MPs do not understand that Behbar log-books are worthy, at the service of health, and keep arguing that we have restricted the public..." [N2,PR,senior policy maker].

Nevertheless, the format of Behbar log-books had its supporters. Many MPs supported the log-book rather than other formats, addressing the potentials to increase villagers' dignity:

"... (An insurance) card is a symbol of discrimination. Why had villagers been deprived of the respect that urban households have, by having log-books with their picture on top..." [P9,MP,member of parliament for the province].

However, there was a serious concern for overlooking referral because of perceptions of the log-book:

"...these log-books are not compatible with FM, because of cultural mismatches. FM log-books should be more valuable than others (like SSO). If I was in charge from the early days, I would have given them a card instead of log-books ..." [N2,PR,senior policy maker].

Many thought that insurance cards might adjust the public's perceptions against referral:

"...I think an insured person must have a card or an insurance number. Because these log-books are being abused in many ways, I do not agree with them at all... nowhere on the planet do people have log-books!..." [N6,O,national union manager and physician].

Some claimed that log-books were in contrast to the principal of FM:

"...even prior to the implementation, my big concern was that linking doctors' earning to the number of visits, would endanger health dominant approach of FM. Thus, services must be delivered using other ways than log-books...I prefer cards as ID of insurance and referral..." [N9,O,senior policy maker].

Therefore, branded the log-book issuance a mistake:

"I would certainly choose a way other than the log-book, which has increased the public's expectations that ask for more drugs and bypass the referral..." [P4,provincial health manager].

Having been tested in other settings, some pointed out the necessity of digitalized registration rather than paper IDs like log-books:

"...log-books are not necessary at all. We could have digitalized and linked our system (DOH) to the MIO..." [P1,PR,provincial health manager].

It was important that the purchaser shared the same feeling:

"The MIO wants to release people from log-books. We prefer smart cards as an alternative, however, the society is not yet prepared..." [P2,PU,provincial manager].

Although, this level of coordination between the MIO and the DOH in Golestan did not exist at the national level, due to the lack of decentralization and early high pressures on the MIO to issue log-books, no digitalization was conducted. Even the GMIO considered the public were not prepared to accept smart cards despite, even illiterate people in remote parts using smart cards to fill their tanks with petrol.

3 Summary

Because of its potentials, most interviewees had a strong positive feeling about the concept of FM, albeit for different reasons among different respondents. By emphasizing

on the concept of FM, this thesis makes a distinction between what people assumed to be implemented, the actual policy and what was executed, indicating inconsistency between expectations and implementation on many occasions.

Villagers welcomed FM because they saw it as a gateway for better quality services. They passionately presented their hope in the policy because of its potential to increase their entitlement for using healthcare and expanded service provision. Representatives of the public and ordinary people submitted themselves to implementation because they interpreted the policy as a media that is going to assign a personal doctor to them, who has a close relationship with them, take cares of them, attends their homes, listens to them, and is trustworthy enough to contribute to their well-being. Such assumptions were based on reflections on what they had seen in western movies, in which doctors visited patients at home. So they expected FM to bring them a doctor who was embedded with them as a member of their family, helped them to tackle their deprivation, narrowed their gap with city, and referred them to specialists. They supported the policy hoping to experience such a situation therefore.

Besides, practitioners, particularly doctors and midwives, who were unemployed and low paid for a long time, welcomed the policy for different reasons. They shared the public's feeling about increasing service provision and improving the quality of care, so they were professionally satisfied. Moreover, they appraised the policy because of its direct effects on them. For instance, they knew that the new payment formats such as pay for performance and capitation payment might potentially improve their earning. They also welcomed the policy because of the huge rise it brought to their payment. In addition, FM created employment opportunities for more than 5000 GPs and 4000 midwives who were unemployed or were doing irrelevant jobs beforehand. They supported the policy because it partly tackled the longstanding problem of unemployment among medical professionals.

Lastly, although some expected different process of implementation, the majority of national and provincial policy makers and managers welcomed the potentials of FM. Some leading people were aware of the benefits that FM brought to the health sector in other countries in terms of equity and cost control. A few policy makers, even those who were not engaged in making the policy, branded FM as a health focused policy that might reengineer the messy health system in Iran and improve the efficiency of health care, which the country had lacked a lot. Thus, there was overwhelming support for FM among

participants at different levels, who expected FM to improve the entire health system in Iran, either because of expecting their ideal health care or based on their own experience.

However, despite the widespread support for the concept of FM, four aspects of the policy were identified as jeopardizing its successful implementation:

- Autocratic policy;
- Unrealistic policy;
- Ambiguous policy; and
- Unsustainable policy.

First, despite its democratic name, the nature of policy making was autocratic. Although the political structure was parliamentary republic, in which members of parliament were elected by the public so represented them for verifying laws, most policies and bills were not collaboratively determined. For instance, FM was made by a few people in the MOH and imposed on others. Key stakeholders, including chancellors of universities, representatives of practitioners and relevant organizations such as the Ministry of Interior and some insurance organizations were not engaged in making and diffusing the policy. FM was based on assumptions and wish lists of a small group of people from the MOH and a few leading individuals from other organizations, including the MPO and SSO. There was not a network of relevant individuals and organizations to gather, accommodate and integrate the necessary inputs in formulating the policy. This was why the majority of local practitioners, provincial managers and even some national policy makers who participated in the policy network, had little sense of ownership. Given the big scope of the policy and significant requirement for collaboration and common work for its universal implementation, the top-down approach significantly reduced people's engagement and cooperation. The policy was not tailored based on local needs. For instance, objections to non-customized drug lists or concerns regarding practical difficulties of Behbar log-books were consequences of excluding relevant stakeholders from the policy cycle.

Second, the idealistic approach to making decisions meant policies did not meet societal realities. Across all three levels (national, provincial and local), different aspects of the lack of realistic views in the policy design were identified. Even leading policy makers who participated in the small policy making network criticised FM, branding it too visionary and

non-fulfillable. However, they did little to improve this, reason to which is discussed in Chapter 10.

Third, policy makers and regional managers also expressed difficulties in understanding and putting the policy into practice. The policy resembled an untailored prescription to remedy too many problems. The fundamental societal problem was replacing operational laws by wishful thoughts. FM policy looked like an attempt to respond to several longstanding shortcomings in the health system. Therefore, the policy was vague so vulnerable to different interpretations and individual discretion. Its language was jargon and explanations of payment, practitioners' duties and recruitment were confusing. This led to frequent revisions and changes, which jeopardized the situation.

And finally, as much as the potential of FM attracted support, some of its characteristics reduced its sustainability. It was not only leading policy makers who were concerned that FM would stop shortly due to lack of funding and political support, but also practitioners in remote villages were also seriously sceptical about its sustainable future. A core problem that contributed to its uncertain status was its funding mechanism. There was no distinct financial source for FM. It was funded by a public budget which was linked to nowhere and was deducted from constructive projects with no calculation. People paid no premium to be insured. Even local staff raised concerns about the future of FM, pointing at that 80% of the country's revenue was oil-based and the volatility of the oil market. Implementation could stop in a short time period because its costs might not be affordable any more. Viewing FM as an unsustainable task had harmful consequences on its implementation. It avoided forming firm partnership between providers themselves as well as between public and practitioners. This led to fading public trust in implementation, which in turn blunted the implementation even further.

Chapter 7: The existing environment

Introduction

Implementing a new policy will depend on the environment in which it is introduced.

Interviews revealed eight aspects of the environment that influenced implementation:

- existing PHC (Primary Health Care) network prior to implementation;
- general specifications of the insurance system;
- organizational capacity of the health system;
- individuals' knowledge and insight toward the policy;
- legal ground for implementation;
- political environment;
- rural setting specifications for hosting the reform; and
- availability of resources.

1 The existing PHC network

As mentioned in Chapter 4, the PHC network (Figure 1.2) was selected for delivering FM. There was a consensus that the PHC facilitated the implementation.

1.1 Position of the PHC for the public

The PHC was the only universal health network in the country that was based on health promotion, rather than disease treatment. Its position was unique in rural areas as the only facility for delivering health services:

"...fortunately, rural health centres have been well established across the country, in contrast to the loose network in their urban counterparts, ...this is one of our strong points" [N11,PR,senior health manager].

It was also trusted by villagers. Despite other practices, the PHC was still the villagers' first point to seek care:

"...even for my little kid, (rural health) centre is the first place I prefer to go to. If the problem was not fixed there, I will go to a specialist...." [L2.9,Imam].

1.2 Accessibility

Consistent with the main aim of FM, the PHC organization was easily accessible:

"...the PHC was designed to serve every 10,000. Even in less accessible areas with small population they easily reach centres ...its accessibility has been improved within the past two decades ..." [N14,PR,former senior policy maker].

It was also population-based that facilitated assigning a doctor to a certain population:

"The PHC was the best medium to implement FM, not because of its existing buildings, rather its population-based structure. In addition to economic advantages, the PHC invests in inhabitants rather than in processes..." [N8,O,senior finance official].

1.3 Efficient hierarchy

The PHC enjoyed a well-organized hierarchical structure, which facilitated the demands of FM:

"...the PHC was the greatest opportunity, partly because of its high-regulated staff with less self-driving power. Whatever is dictated to them must be obeyed, which leads to better performance ..." [N1,PR,former senior health official].

This quotation also reveals to what extent the top-down approach was embedded in the central policy makers' mind, pointing out the need for prosperous centralization for proper implementation. In addition, such hierarchy increased the flexibility of the PHC, which contributed to the progress of implementation:

"The PHC has shown its efficacy over time. Enjoying a flexible structure, it reacts pretty fast that enables it to undertake a lot of tasks in a short time span..." [P4,provincial manager].

1.4 The only possible host

The existence of rural networks over the last two decades meant that implementers did not have to start from scratch. It helped them save time and expenses by just renovating and equipping centres to accommodate FM. Because of the defined population in rural health centres, assigning doctors and health teams was also easier:

"...the network (PHC) made the implementation much easier. There was a well-structured network with accessible services for a defined population. We improved this by strengthening the skeleton and some house- cleaning..." [N14,PR,former senior policy maker].

The comprehensive PHC infrastructure in rural areas compared to the fragile PHC facilities in the cities led to starting implementation in villages:

"...timing was crucial. We had to do many things in a short time period. This was not possible without the infrastructure and amenities that already existed in villages. It was the right decision to start there..." [P3,provincial health manager].

Other media to accommodate FM in villages seemed impossible therefore:

"I think the PHC created an appropriate environment for achieving more than 90% of the aims of FM in rural areas. Other hosts in villages were just imaginary. Being equipped with deep theoretical concepts and lots of experience, the PHC is a huge network with a firm and reliable organization..." [N4,PR,senior policy maker].

"...structure must follow the strategy. Could you imagine taking a single step if we did not have the PHC? Nothing was there but health centres..." [P1,PR,provincial health manager].

Nevertheless, a purchaser with insurance mentality who preferred to commissioning services out to the private sector described the PHC as not capable to host the implementation, not because of its organization, but its poor facilities and equipment:

"...because of its lack of resources, the PHC would not be able to properly host FM..." [N5,PU,senior insurance manager].

The PHC was also accused of not being compatible with gate-keeping as an essential requirement of referral:

"...the PHC principle is an up and down movement across the road. Trying to match this model with FM, the first battle is the mismatch between first entrance (health houses led by behvarz) and the prototype of FM (with FD as the guide). I doubt this could be tackled in the current format..." [N17,PR,health manager].

This point, mentioned by one of the main developers of the PHC, emphasizes the importance of reengineering FM as much as possible to adopt it with the PHC. Because of the strategic mismatches, some mentioned that the PHC might only facilitate prerequisites of FM:

"... the PHC networks in villages is only an introductory tool to FM, it is not FM..."
[N6,O,national union manager and doctor].

Some had serious doubt regarding the ability of the PHC to match the strategic aims of FM, mainly because it was a governmental organization rather than the private sector:

"...the PHC is dead at the time being, because it is public. You could not implement FM via the public sector..." [N13,PU,national insurance policy maker].

The PHC as a medium for FM was also criticized of raising governmental share in service provision, against the 4th plan for development of Iran:

"...the PHC has lost its original specifications... its public management that is contrary to the 4th plan has reduced its effectiveness.. We must trust people. We must have purchased services from private providers..." [N5,PU,senior insurance manager]

In addition, due to the lukewarm presence of the PHC across cities, the majority ruled it out as the host of FM in cities:

"...the PHC is passive in cities, it would therefore not be able to perform as effectively in cities as in villages..." [P2,PU,provincial manager].

Predictably, almost all critiques of the PHC for hosting FM was raised by purchasers who believed in commissioning and privatization of services, even in rural areas. The MOH was not fundamentally against the idea, however, private sector's presence in villages was very weak. Given its reluctance to invest in the preventive components of primary care, the existing public owned PHC was really the only choice in villages.

2 The insurance system

Several concerns were raised about the insurance system, with direct and indirect impact on the implementation of FM.

First, the health insurance system was criticized because of both its premium rate and compensation procedure:

"...insurances do nothing. What insurance is this while one must pay 70% of his costs? This is not acceptable in any place on the planet! Insurance means the insured should not pay more than 30% of costs..." [N6,O,national union manager].

This interviewee emphasized that unless the insurance system undergoes essential changes, other health reforms would be ineffective:

"You must assess the principal problem which is the insurance system in Iran. It might be optimum for insurers, but not for the insured at all... this is the first and most fundamental issue. The insurance industry is flawed in our society. The insurers' approach should not be compassionate like this. If insurance systems are improved, villagers will be automatically benefited, otherwise, I do not know what you are studying..." [P6,O,senior cleric in Golestan province].

This person mistrusted the insurance system a lot so doubted the efficacy of any health system reform that employs the current insurance format.

Second, because there was no reliable database of insured people, routine functions of insurers were considered flawed:

"...the MWSS was formed mainly to create a database of the insured population, but we are still nowhere ..." [N10,PU&PR,national team for reform].

Lack of a database led to insurance disintegration and overlap so some rural people were also covered by public insurance schemes other than Behbar, such as the SSO:

"...there is 20% overlap in the MIO pooling system..." [N7,O,senior insurance official].

Meanwhile, another national policy maker announced the overlap figure at around 7-8%. Significant mismatches in the percentage indicate the necessity of integrating the insurance pooling:

"...a 7-8% overlap exists in Behbar, I think this can be tackled by integrating financial pooling ..." [N11,PR,senior health manager].

In contrast to the principles of Behbar, overlaps ended up in users' confusion and inequity. For instance, villagers under insurances other than-Behbar must have paid fees at market price (300% of that of FM):

"...my understanding from the insurers' role in this implementation is that people with log-books other than Behbar have to pay more..." [L1.4,midwife].

Worse still, there were a few operational difficulties due to this:

"...in industrial villages, where many are SSO's insured, or in poor villages where most people have the MIO or IKRO (Imam Khomeini Relief Foundation) insurance, we face a big problem to serve them service. This raises concerns about inequalities..." [N4,PR,senior member of national team for health reform].

To sum up, numerous insurance companies with various policies and tariffs conflicted with FM, insurance integration was one of its requirements:

"...the main rationale to establish the MWSS was to create of a single organization with a single Board to integrate policies for the entire population. Some (insurance organizations) have financial concerns for integration. There is no need to have a real unique fund pool, but a virtual pooling with integrated policy works better... expanding the policy to the cities is not possible prior to such an integration..." [N15,PU,senior insurance policy maker].

3 Organizational capacity of the health system

The thesis revealed four aspects of the organization of health services affecting implementation: the existing capability of custodians; conflict of interest at national level; the financial governance of health; and a poor collaborative environment.

3.1 Capability of the implementers

Interviewees were concerned about the effectiveness of the organization of the responsible department in the MOH to undertake the implementation. The "PHC Expansion and Health Promotion" (PEHP) group under the Deputy of Health in the MOH, along with DOHs (Department of Health) in provinces were appointed as custodians of implementation. However, their capability to perform the reform was doubted, even by themselves:

"...PEHP has put itself far away from technical issues. I believe that the PEHP structure must be universally revised, otherwise a massive part of leadership will be paralyzed..." [P4,provincial health manager].

The managerial capacity of the MIO and the MOH was challenged because necessary arrangements were not made to accommodate the implementation. For example, the lack of full-time personnel, for whom implementing FM was their only task:

"...we cannot implement Behbar only by the PEHP, which is very busy by purchasing vaccines, providing formula and contraceptives and equipping health centres. We are putting a big extra burden on its shoulders to manage FM, which is

unaffordable...the MIO is even worse, within it there is not a distinct office with independent personnel and full engagement in Behbar,... [N5,PU,senior insurance policy maker].

Worse still were concerns about the capability of staff within that group:

"...given the lack of proper infrastructure, implementation has been handed over to the PEHP, which has been disabled even in performing its PHC duties. Taking its long-run lack of expertise and resources, how would this unit be able to handle such a big task (FM)? ..." [N5,PU,senior insurance policy maker].

3.2 Conflict of interests at national level

A few interviewees with no conflict of interest identified top policy-makers as the principal flaw in the current health system:

"...our health system is like a messy soup. A few national policy-makers with close tie with the private sector, who mostly think of maximizing their profit regardless of how and at what cost make main decisions...I think if our ministers had graduated from England, our system would have perhaps been different. In fact, the majority of our ministers have graduated from the US, believing in the free market. Quote me on this: the principal problem of our health system is that public policies are made by people who have simultaneous benefits in the private sector ..." [N8,O,national policy maker].

Conflict of interest interfered with the private sector cooperation with the reform. Specialist doctors, particularly ones who were involved in importing high technology medical equipment, were against FM, believing it would endanger their profits:

"... Levels two and three [of referral] are our specialists and higher specialists, who disagree with referral and rationing the services. They assume that their patients would be eventually reduced. Moreover, many specialists have invested in importing high technology machineries. Medical technology is expensive and costly. The referral system discourages using such technologies..." [N10,PU,PR,national team for reform].

The conflict was threatening the role of unions such as the IMA (Iranian Medical Association) to defend doctors' position in the society:

"...look at the IMA's function which is more or less at the service of some particular persons. It is somehow dead. It could revitalize itself by getting involved in FM and criticizing the wrong! Implementation..." [N5,O,senior insurance policy maker].

The Government responded to this problem by strengthening the public health services, which ended up in a vicious circle of investing money in the public sector that led by people whose financial interests were in the private sector, so deteriorated the public sector's reputation before the public:

"...we do not believe in what we have said ourselves. As the government, we invest money in public services, while we keep telling people that public services are flawed and bad and make contracts with the private sector, sometimes ten times more expensive...people do not distinguish between good and bad, rather we suggest people to brand public services as bad when we suggest them to go to private clinics to get better services..." [N14,PR,senior former health policy maker].

Public policy-making was in the hands of people whose benefit was simultaneously in the private sector. Fighting to balance the proportion of private and public sectors in service provision ended up in excessiveness and dissipation. Furthermore, politicians who were supposed to defend the public sector, behaved as though the quality of services was lower in the public sector. As a result, public confidence in the quality of services in the public sector was damaged. National policy-makers accused specialists and private GPs of making the public doubt the quality and efficiency of services in FM:

"... doctors who freely visited patients in their own clinics, alongside specialists who assumed their patients would be reduced are opposing the policy. They keep telling the villagers that the services in health centres are unrighteous ..." [N11,PR,senior health manager].

Some big pharmaceutical dealers, who were branded as the drug mafia, were also labelled as powerful opponents:

"...if you take a right action, some people's profit is endangered so they resist. For instance, if the interests of drug mafia are not carefully taken into account, we will be defeated by this serious enemy..." [N17,PR,policy maker].

That was why opponents from the private sector actively tried to defeat the reform:

"Specialists' income would drop because of FM. Thus, they began to send letters to officials, stating their endangered benefits. They even wrote to the president, the governor and MPs. I was frustrated once the governor [of Golestan] wrote to me to object Behbar...." [P1,PR,provincial health manager].

One MP explained how doctors addressed those objections:

“...a group of GPs met with me during the Doctor’s Day ceremony, complaining about the reduction in their clients and that they could not run their clinic...”
[P9,O,senior policy maker].

Those objections, alongside the lack of support of MPs, ended up in serious objections, which damaged implementation in its early stages.

Even the pre-requisites of the reform, such as creating the national health account to finance FM, was in conflict with the interest of some organizations like the SSO. Being aware of such conflicts, parliament preferred to inject global funds into Behbar, to bypass the practical conflicts in implementation. They hoped such an account would be created in future, as the MOH was pursuing:

“The integration of the pooling system as our ultimate goal has had its strong opponents... we would not like to make a crisis. We do not want some stakeholders to assume they are losing something, we prefer they think they are achieving some benefits...” [N12,PR,senior policy maker].

Society was well aware that such objections to FM were because of conflicts of interest:

“I used to be the head of campaign for a presidential candidate. I advised him to insist on FM as the main strategy for health sector reform. He replied: this is controversial, are you going to ruin all my chances from the beginning? He reasoned that FM has its opponents, many of them senior and influential... it took ages to convince him to do so, even reluctantly!...” [N13,PU,senior insurance manager].

3.3 Financial governance of health

Financial system was identified inappropriate because of lack of integration and inadequate funding allocation.

3.3.1 Lack of integration

For several reasons, the financial system was generally considered inefficient to accommodate requirements of the reform:

“...the health financial system is very complex, bad, inefficient, and expensive in Iran...” [N17,PR,national health expert].

Lack of a “National Health Account” (NHA) was a reason for unsustainable funding:

"The best way to manage this messy insurance market is integration of all insurance pools to form a National Health Account. However, this seems unlikely because of great resistance. In addition, different organizations charge clients with various premiums. There is also leasehold ownership and overlaps between the private and public sectors.... you cannot stick to the theory and imagine this is a motorway where you can speed up to 180 Km/h all the way through..."
[N4,PR,senior policy maker].

There were tens of insurance schemes across numerous organizations which made integration difficult. Lack of a pooling system prevented reformers in designing sustainable funds for the reform:

"...multiple insurance schemes make it difficult to form a pooling system. Since the Shah's era [before 1979], international organizations such as the WHO and the World Bank have persuaded us to remove this big barrier. To provide a united package for the public, pooling (resources) must be quickly undertaken..."
[N14,PR,former senior policy maker].

Three reasons were mentioned for resistance to pooling integration: complex bureaucratic structure; lack of coordination and conflict of interest:

"...despite adequate resources, the financial cycle is very slow ...our budget system is too bureaucratic. We are always behind budget allocation and distribution..." [P1,PR,provincial health manager].

"...there are two things without which every system will collapse: integration and coordination. First, we must become integrated, then coordinated, or probably at the same time..." [N10,PU,PR,national team for reform].

"...if only we could integrate the pooling, the efficiency would have rapidly gone up. However, many social and political factors are against us. The SSO does not allow sharing the labourers' money with the united pooling, considering this as injustice. Civil servants also object sharing their money with rural people..." [N4,PR,national team for reform].

This made the system inefficient and wasteful:

"...even for FM, the MOH pays for prevention, while the MIO pays for the curative part. This is simply the system inefficiency... It is impossible to have a cost-effective system without unitary funding. Because unity would limit some people's power, they resist to it..." [N7,O,senior insurance policy maker].

This interviewee's interpretation was that funding is divided between MIO (for curative) and MOH (for preventive) services. He labelled the system inefficient which wastes the funds.

However, the case was different in reality and all services in FM were paid through a global injected fund of Behbar.

3.3.2 Inadequate funding allocation

General low per capita funds for health in Iran was mentioned as a main barrier for implementing any reform, including FM:

"Despite a reasonable budget, the overall budget for health as proportion of GDP has always been low..." [N3,MP,member of parliament].

This was one of the reasons behind dissatisfactory services:

"...we provide such services with this (little) money... our per capita is less than 150 USD a year. It was 106 USD last year, not thousands of USD like the European countries..." [N14,PR,former senior policy maker].

Even in very remote areas, low per capita funding was identified as a fundamental problem, unadjusted to inflation and expectations:

"...the government's incapability to provide appropriate resources is a long repeated story. Everybody knows that the health budget is far behind the expectations. In fact, the government must pay the main health expenses... Per capita must be adjusted with economic realities like inflation. While expenses get tripled, per capita still remains constant..." [L2.1,DA,district health manager].

3.4 Poor collaboration

Lack of teamwork in the health system was revealed as a big challenge to implementation. The nationwide established culture of individualism seemed to be the main reason for poor collaboration. For instance, only a few national policy makers acknowledged other stakeholders' role in this reform, whereas the majority attempted to prove their sole role, explicitly denying the others' impacts and efforts:

"...I was the only one chasing money for the reform by spending three days a week in parliament. The government prevented me to transfer money from other plans to Behbar... there was no one other than me..." [N1,PR,former senior manager].

Every involved organization tried to take its own benefit singularly rather a united multi-organizational implementation:

"...the policy must be executed; however, the problem is that we have converted the reform from its national format to a small partial project. Some people think this is the MOH's job. Others say that the MWSS must carry that out. Parliament considers itself the inventor of the reform... look at the MOH for instance. 507billionTM was allocated for FM. When we started to work its only effort was to take the whole money. The same applies to other stakeholders..." [N5,PU,senior insurance policy maker].

Unfortunately, the more senior and influential people were, the greater their extent of individualism. Individualism showed itself more practically, as a lack of teamwork in the periphery:

"...look at Tehran as the capital of Iran, which is the most retarded in implementing FM. Why? Because there are three universities in charge of implementing FM in Tehran, none of which tolerates the other, each of them playing its own instrument..." [N5,PU,senior insurance manager].

Some described the rushed implementation as a sign of individualism and show off:

"The most important factor which forced the MOH to start the implementation in their last days in office, was their desire to boast. The minister (of health) liked to count it as his personal achievement..." [N6,O,national union manager and physician].

In addition, individualism led to contradictory interpretations of FM. Worse still, tribal and personal benefits were prioritized by the implementers:

"...in province X, the head of the MIO was a clever and open-minded guy with good understanding of the PHC, our difficulties were therefore minimum. In province Y (neighbour of X), the head of the MIO was in 24 hour fights with the DOH, due to their long-term tribal trouble. This shows that his knowledge and insight was not concrete enough to prevent tribal interests, personal interests therefore affected social responsibilities ... he asked me to grant him a personal scholarship if I expect his cooperation [for FM]..." [N1,PR,former senior health official].

4 Individuals' knowledge & insight

The extent to which stakeholders' insight and knowledge affected the implementation is investigated under four headings: policy-makers' attitude towards FM; transferring

knowledge to practice; policy makers' knowledge of local conditions; and the importance of key individuals.

First, personal interest in FM either because of knowledge and expertise, or policy-makers' personal experience as either user or implementer of FM in different settings, was the key factor behind their motivation towards FM:

"...there were reformists who endorsed the modern notions of health sector reform after 1997. They held flagship courses and promoted principles of health economics and evidence-based policy making. Their attempts ended in embedding such concepts in national plans such as the 4th plan for development of Iran. Those things were strange beforehand ..." [N8,O,national finance official].

Over their period in office as chancellor of provincial universities, the former minister of health and his deputy had piloted FM in their sovereign provinces. Even though their understanding, model and experience of FM were fundamentally diverse, their endeavours to establish a series of reforms with the axis of FM were widely acknowledged:

"...I wrote a book about FM while I was chancellor of the University of X (20 years ago). I am not considering it the holy book of FM, rather I want to emphasize how FM has been my apprehension all these past years. Dr. X has also been following this within the last 15 years..." [N1,PR,former senior health official].

They were also knowledgeable for essential features to make such a policy:

"...we always had three pillars of health sector reform in mind: accountability, accessibility and availability. We attempted a lot to establish these concepts as cornerstones of policy making ..." [N14,PR,former senior health official].

Second, stakeholders' unenthusiastic understanding of the social determinants of health made the implementation of FM difficult:

"...if only policy-makers would have considered health as the right of the people and themselves responsible in fulfilling this right...I wish they had a better understanding of health ..." [N9,O,senior policy maker].

Because of such a lack, they were not well-prepared to financially invest in health:

"...policy-makers must understand that investing in health at this stage, even huge sums, would be saving our monetary sources in the near future. Investment in health needs a vision, which the majority of stakeholders are deprived of..." [P4,provincial health manager].

Third, policy-makers were accused of flawed policy making, because of the lack of insight into local conditions and knowledge of the fieldwork:

"...I beg your pardon! The one on the top (of MOH) has no idea about the real situation in rural areas. Decisions-makers have no field experience..." [L2.8,private doctor in village].

Key central policy-makers also echoed the claim:

"...principles of PHC management emphasize that policy makers and managers must be continuously present in the field, rather than just relying on reports... ironed trouser and polished shoes are not suitable cloths for health..." [N4,PR,senior member of national team for reform].

Fourth, insight, dedication and commitment of some key individuals including the former minister of health (2001-2005) were an important factor in starting the reform:

"...if it wasn't for a responsible person as Dr. X, who spent his entire period in office to establish the reform, the one that personally attended and firmly defended FM in all occasions, the implementation would not have started at all..." [N17,PR,national health expert].

Even at remote areas, his unique efforts to formulate and execute the policy were acknowledged. Among many actors, he was the only one who was frequently cited:

"...particularly, Dr. X's enthusiasm ended up in implementing the policy. We had heard that he had undertaken a similar reform in province Z...." [L6.1,DA,district health manager].

In addition, medical MPs (Member of Parliament) were identified as facilitators of implementation, either in budget allocation or supporting its execution:

"Medical MPs faced a paradox between their belief in the documented international experience (of FM) and the public's dissatisfaction of rationing...because of their insight in FM, they influenced non-medical MPs to vote for the policy..." [N4,PR,national team for reform].

5 Legal ground for implementation

At the macro level, in addition to getting endorsed in the 20 year vision for the development of Iran and the "Supreme Council for Health & Food Security" declaration for

health sector reform, FM was embedded in the 4th five year programme for development, which secured it to be overlooked by various governments:

"...parliament endorsed FM in the 4th five year programme. This forced the government to replace the existing treatment dominant insurance scheme by health insurance... the 4th plan gave an operational guarantee to FM and referral..." [N3,MP,member of parliament].

Parliament had a power to force governments to implement the policy. It could also monitor the implementation and detect deviation:

"...the 4th plan obliges us to deliver health services towards FM and the referral system...parliament monitors our movement in this direction..." [N12,PR,senior health official].

More deliberately, the necessity of separating the purchaser from provider was endorsed in the 4th plan:

"...we endorsed in the (4th) plan that the MOH must make policies, while the MWSS was appointed as the purchaser...no one could bypass this..." [N14,PR,former senior policy maker].

6 Political environment

6.1 General pattern of health governance

The political ground of the Islamic Republic of Iran was branded as inconsistent, with significant and costly trial and error practice. Because of the unique structure, it was hard to adopt suitable policies for the reform:

"...our (political) structure was not prepared to accommodate capitalist or socialist ideas or any model from such regimes (like FM). We are a unique setting, within which everything must be experienced... how can I explain our system (laughter and pause)? Currently, we are too centralized with the government represent almost everything. We do not even have a distinguished identity and definition from governance in the Islamic Republic. Sometimes we become extremely socialist, whereas, we become more liberal than any existing capitalist system in some occasions. Our current pattern is not suitable for adopting FM. We should go ahead until it finds its own way! ..." [N1,PR,former senior health official].

The trial and error practice to prove obvious things has been costly. Defining the macro approach to health was requested as a priority therefore:

"If I was influential enough, I would have ascertained a pattern (for the health system) first. No one tries to re-invent the wheel..." [N10,PU,PR,national team for reform].

6.2 Ambiguous policy-making process

Constitutional aspects of governance in Iran were identified as ambiguous, lacking transparency and a clear approach. Even key policy makers were unclear about the underlying philosophy of health:

"...we are an Islamic regime without defined governance, moving between capitalism and socialism. Our macro direction is ambiguous and our policies are vague. For instance, although we brand foreign investment as bad and a sign of imperialism, to justify our benefits we call it a great thing sometimes. Our constitutional policy is not defined...as an expert I do not know our main approach to health..." [N5,PU,senior insurance official].

Ambiguous macro-philosophy of health led to undefined policy making that exposed the policy to misinterpretation:

"... [Undertaking] reform is very hard in this country. We even change our minds once executing the policy. Our main quarrel was asking for decision makers' faithfulness to their own decisions..." [N14,PR,former senior health official].

Some mentioned it was because policies were being made in a vague background:

"Because of undefined policy making, many decisions are made with no theoretic background. Many approved FM with no idea about it..." [N4,PR,senior member of national team for reform].

Some branded the ambiguity intentional to fulfil the policy makers' personal aims:

"...optimism is achieved upon ambiguity. Authority is in ambiguity. Transparency brings responsibility that might be in contrary to the politicians' interests..." [N7,O,senior insurance official].

Among individuals' interests to keep the vague background, religious beliefs were mentioned as an example:

"In principle, I focused more on villages because of their long negligence in the development cycle. More importantly, Islam and Imam (founder of the Islamic Republic) as manifestations of Islam, were willing to assist poor..." [N9,O,senior policy maker].

Lack of a defined model to approach the health system exposed FM to personal preferences and led to diversion of the policy from its main goals:

"...it is very important to determine whether we are thinking of prevention or treatment. Otherwise, in case of political pressure, diversion from main goals looks pretty likely ..." [N8,O,national financial official].

Ambiguous governance of health made undertaking any change difficult:

"...health patterns are classified as libertarian or egalitarian. We still do not know which one we are. Libertarian sometimes, Unitarian occasionally, while making rapid u-turns towards egalitarianism sometimes. Indeed, in some messy occasions we have no direction at all. Look at our payment system for example. It comprises direct and indirect payment, along with reimbursement. Do you know another place on the planet like this? ..." [N7,O,senior insurance official].

Lack of a clear macro philosophy for the health system blunted big changes, dissatisfied individuals and made them reluctant:

"Practically, there is no theory behind the (health) system in this country. Quote this from me! We have handed over this bus to 100 drivers. Once reaching the crossing, we ask passengers for their favourable direction: right or left? Some passengers say: left. The next traffic light, some passengers shout louder: right. We turn right then. At the end of the day, we will fall to the bottom of a valley... the Iranian health system is messy. Many prefer this mess (to continue) because of their benefits..." [N2,PR,senior health official].

The impacts of a lack of a clear philosophy to run the health system were illustrated in this quote. The health system was described as a plane that was being piloted by a number of pilots with different destinations. Attempting to change the oligarchy was hard therefore, unless the system became transparent:

"...most efforts to improve FM fail because of the systematic lack of transparency, which makes interferences inevitable. If only we had a sustainable and clear (health) system ..." [N3,MP,member of parliament].

Thus, selecting a model for macro pattern of health was fundamental for revitalizing the reform:

"I addressed the cabinet that the entire jurisdiction must make the big decision of choosing a model for the health system. Unless the pattern is selected from three existing models: social insurance like Canada; centralized tax-based like the British

NHS; or a free market like the USA, we would not be able to define our strategy. We are camel-cow-tiger at this time... [N10,PU,PR,national team for reform].

Nonetheless, some branded the current system potentially brilliant for improving the implementation, because of the FM compatibility with the milestones of the Islamic Republic and the revolution ideals:

"...social justice is consistent with the fundamental motto of the Islamic Republic. No one is entitled to argue such concepts. Socialization is fulfilled by giving facilities to the poor...I believe this is in line with main aim of FM. We grew up with such revolutionary mottos ... surely, such a system would be much better than a blind socialistic structure. It could get better than capitalist regimes as well. Our system is more matched with socialistic ones and might get even better than them..." [N1,PR,former senior health policy maker].

7 Rural setting specifications

Starting implementation in rural areas, rather than the original intention of starting in cities, turned out to be a benefit. Characteristics of villages and small towns assisted the introduction of Behbar for four reasons:

First, rural areas were less complex than urban areas:

"... villages are far less complex than cities. There is not a complex stakeholders' involvement there. The private sector is also weak in villages. Furthermore, there are not powerful political or trade unions there..." [N17,PR,national health expert].

Second, compliance was greater because people had traditionally no effective insurance:

"...90% of our rural population had no insurance [prior to the implementation]. In cities with only 10% uninsured and a complex insured composition of 40% by SSO, 20% by MIO, 20% by army and 10% by IKRF the implementation was very difficult..." [N4,PR,senior member of national team for reform].

Third, there was a strong desire for better services in villages, particularly for a system which met their needs and provided them with similar care to their urban counterparts:

"...people in rural areas [before FM] kept asking for [insurance] log-books which covered them like urban inhabitants..." [N3,MP,member of parliament].

FM was therefore a chance to fulfil their long-term expectations:

“... (rural) people were really in need of this programme. it was not their choice, but an opportunity to remedy their prolonged deprivation of services...” [N1,PR,former senior health official].

Local staff recognized the advantage of starting implementation in rural areas:

“...it is better to resolve some implementation problems here (villages). Managing the reform in cities is very difficult, whereas, here you have easily all people under one roof. Let's go further in villages first, it could be expanded to cities afterwards...” [L1.4,midwife].

The local people supported the implementation by their contribution to the reform:

“...rural health centre X in province Y was too small to accommodate the health team. Villagers allocated a part of their mosque to FM that used to be women's worship place. They also prepared two houses in every other village for doctors' stay over nights...” [N2,PR,senior health official].

Their help even extended to donating money and labour to empower logistics:

“...there is a film showing me ask the villagers to build a residential place for doctors,... you will see how they contributed up to 80% of the cost. Willingness of the people in need of services motivates them...” [P7,PR,provincial health expert].

And finally, the private sector was poorly developed in villages to compete with FM:

“...people go to health centre easier in villages because of less access to private doctors and other practitioners ...” [L3.5,E,local health technician].

Lack of private provision arose because:

“...the private sector is not interested in rural health houses. On the other hand, we cannot hand over those because of the local employees who are supposed to stay there for their entire life ...” [N12,PR,senior health official].

Starting implementation in rural areas did, however, have some difficulties. First, physical access was challenging:

“...planning is difficult because of the geographical problems. We have to plan for areas with temperature ranges between -10 to +40 °C at the same time. Reaching some areas needs at least three hours driving, whereas some places are close to big cities with good roads...” [N1,PR,former senior policy maker].

Practitioners were not keen to work in such difficult conditions:

"...23 million people have been insured in an area of 1.7millionSqKm, most of it is mountain or desert. In some areas only two people live in every 10SqKm, whereas some places accommodate 200 persons in every Sqkm..." [N15,PU,senior insurance manager].

Second, the diversity of ethnicities in rural areas presented difficulties:

"...we are facing diverse ethnicities even within our centres that make it difficult..." [L4.1,DA,district health manager].

And third, rural areas in Golestan had an additional problem of providing services for Nomadic populations who seasonally move across the borders of neighbouring provinces. Registration and allocating a per capita budget were practical challenges for this groups:

"3 out of 23 million villagers are Nomadic people. Where should they be registered when moving? How could we keep their records in such a situation?..." [P4,provincial health manager].

For instance, villages in mostly immigrants' destination faced administrative difficulties:

"...our rural movements are wave-shaped because of huge immigration towards here. One third of the population are Sistani or Balooch (an ethnicity from south-east of Iran), with high turnover across the province..." [L2.2,DA,district health expert].

8 Availability of resources

The extent to which the logistics were prepared prior to starting implementation affected it. The availability of resources including the physical facilities, equipment, funding, staff and clinical guidelines is investigated in this section.

8.1 Physical facilities

The PHC infrastructure was the only facility to accommodate FM in rural areas. However, the existing health centres were not appropriate for practicing in. Residential amenities were also not comfortable for doctors to live in:

“...Implementation was not supposed to start that early. We started to recruit doctors and midwives without allocating the proper physical spaces. Even our purpose-built (health) centres were not appropriate for accommodating more than one doctor. Other staff were not able to stay there, because of which the philosophy of FM was fading...design and appearance of centres were not also comfortable. Due to monetary shortages, we could not renovate centres, many of which are rented...” [N11,PR,senior health manager].

No funds were allocated to make physical facilities suitable for implementation:

“Our PHC infrastructure is weak. About 55% of rural health centres and health houses are rented in Golestan. We must spend at least 20billionTM to improve this [almost 2.5 times the provincial budget for FM]... no money has been allocated for such renovations. Even if we had money, we did not know what to do to meet the standards of FM...” [P1,PR,provincial health manager].

One health centre that served 5000 population, was a shop with three doors (Figure 7.1), very cold in the winter and presumably hot in summers. Its small visiting room smelled of the oil burning heater. The room was also being used for administering injections (Figure 7.2). The waiting area was a 4Sqm corridor on the way to the other personnel exit. The next door shop was for midwifery with slightly more privacy, while the third shop door was for dentistry, which was open only two and half days a week. Visiting with patients was likely to be interrupted several times because of giving injections. Enjoying the World Bank PIU (Programme Implementation Unit) funds, a new purpose-built centre had been constructed, but it was not being used for managerial reasons and tribal challenges among the villagers themselves. In addition, there was no place for the doctor to reside in the village, so he had to commute almost 120KM every day:

“...most of centres do not have facilities to live in because of their rental condition. Doctors stay there 8 am- 4 pm” [P7,PR,provincial health expert].

In contrast to the aim of FM, people were abandoned there during out of hours (4pm-8am):

“...patients must go to centre X (district) for out of hours services. We have been following this problem a lot, trying to push officials to instruct doctors for night stays... we are 3 KM from centre X, you can hardly catch a cab...” [L1.1,DA,district health manager].

Ironically, there were two health houses in that village with better buildings and facilities.

The lack of physical facilities, both for residence and clinical practice frustrated doctors:



Figure 7.1 Health centre in village X (60KM from the capital province of Golestan)

"...as you can see the facilities here, it is more like a tomb than a clinic. Is this a place for practice? This is disgraceful. My wife accompanied me one day, and left in absolute anger. We are freezing here. After many followings, a disgusting oil heater was installed. I go back home with a headache, my cloths smelling of smoke. I was a doctor (before FM) practicing in my own clinic, with no boss..."
 [L1.2,FD,family doctor].

Even in villages where luxury PIU buildings were being utilized, commonplace problems such as the lack of heating/cooling systems, no proportionate space allocation, warehouse inappropriateness and pharmacy shortages prohibited proper implementation. I stayed in a recently built health centre in an area that had been recently granted township. Its location was wonderful, however, no heating system was in operation. People were freezing and counted seconds to escape the place as quick as possible. Specifications of the building were also not in line with the requirements of FM, e.g. with three doctors on duty, there was only one consultation room. There was also no designated place for laboratory and radiology services. A number of rooms were empty because of unexplained managerial decisions, while personnel were forced to share rooms that interfered each other's duties:



Figure 7.2 Visit room in health centre X.

"Despite our heartily desire, we are not able to deliver appropriate services due to physical difficulties. In centre X (purpose-built centre) with four doctors on duty, only one of them can practice..." [L2.1, DA, district health manager].

Furthermore, in some areas with excessive land and proper funding, the lack of residential facilities forced doctors to commute and leave the village at night:

"... [Improper] logistics is our second main problem. Because of insufficient residential places for doctors' night stay, we must compromise many times. As a result, FM is not delivered as intended..." [P3, GMU, provincial senior health manager].

In some centres with a residential place for doctors, the poor quality of the buildings and its facilities discouraged them to stay:

"...I feel imprisoned when I stay for night shifts here. It is residence just by name..., what great sin have I committed to have to stay here? Is it a problem that I come from a family who care about cleanliness?" [L2.4, FD, family doctor]

The situation persisted despite the national managers' awareness of the requirements:

"If we expect doctors to stay in villages, we must provide them with a comfortable environment. Otherwise, they simply escape..." [N9,O,national policy maker].

The lack of basic facilities along with live in necessities were serious challenges before implementation:

"...retaining doctors and other practitioners in remote areas and villages has been our big challenge. Because of resources scarcity in villages, they do not stay for long, particularly once their kids reach school age. The society must invest to create welfare facilities in villages..." [N10,PU,PR,national team for reform],

8.2 Equipping health centres

Health centres were not appropriately equipped with facilities for practice or transport and other necessary materials:

"If we were serious in improving services, we should have allocated better resources. Regretfully, there is little money for this in Behbar. If I could reallocate resources, I would spend some to calibrate existing equipments. Many people visit us healthy and leave us sick...these things have become normal in our system, sad to say (interviewee was upset saying this). Having a doctor, nurse or midwife is just part of the solution..." [P1,PR,provincial health manager].

The system was prepared to pay up to 1millionTM to doctors every month, but not providing them with simple equipments:

"...we do not have many items in health centres such as DC shock, ECG, etc. Our sphynometres are out of order. They (DOH) gave us some brand new otoscopes, which were originally impaired. We even run short of wound dressing sets, ...we were supposed to buy the needed items using part of the FM budget, but we ultimately were not allowed to do so..." [L4.1,DA,district health manager].

When finance was available, equipment purchases were restricted to low quality Iranian and Chinese products:

"...when the money was allocated, I was instructed to purchase either domestic or Chinese products. However, I did not do so. I am not sure that the Iranian made sphyngometre is able to correctly measure blood pressure ..." [P3,GMU,provincial health manager].

Existing equipments were also far behind the public expectation:

"...providing services is linked to facilities. We must have equipped health centres, particularly with ambulances. The disaster here is that we do not have the essential tools for emergency cases..." [L3.9,imam].

Public compliance and trust are essential to establish and frame a reform. People could not trust health centres, where their relatives had died because of facility shortages:

"If only the government had spent a very small amount of the 1000billionTM (budget for FM in 2005 and 2006) for equipping centres...they are guilty of the bloody mistake of increasing the public's expectations, with the least investment in equipments. They just increased the doctors' number from 1 to 4. How can a paralyzed doctor perform?...our doctors are excellent, but with no tools. Moreover, there are no laboratory facilities. I'd prefer to go to the city to see a doctor, if I am obliged to go there to do my (lab) test...there is also no transport facilities for patients. Our women might die in emergency situations..." [L2.10,teacher].

The reason was partly the lack of knowledge regarding the logistics of health care. People in charge of logistics were short of expertise:

"...the main problem is our approach to health care logistics. We did not recruit people with appropriate expertise for the management of logistics, such as the ones with a PhD in management of health services. Whereas we appointed a dentist as the university deputy of logistics. Worse still is that once he became slightly experienced, he was replaced with someone worse ..." [P5,O,provincial union manager, physician].

I observed that variations between six health centres in terms of equipments were significant.

Practitioners blamed themselves that equipments shortage prevented them from appropriate performance:

"...there is not even a suction machine here. I could not forgive myself when a 21 year old young man died before my eyes by drowning. Perhaps, he would be alive if we had a suction (machine)..." [L1.4,midwife].

Ironically, central policy-makers believed that equipping health centres improved services and revitalized health centres, which were dead beforehand:

"...facilities are not ideal for sure. To prevent villagers' commute, we must deliver as many services as possible. However, the reform has mobilized centres a lot, which were previously abandoned or dead" [N3,MP,member of parliament].

8.3 Funding

Interviewees consistently acknowledged the importance of the monetary window that parliament opened to implementation:

"...during the last 5 years, we were looking for a monetary chance to implement FM. The government had abandoned the pilot implementation in four provinces, due to lack of funding. The MOH was supposed to get 1.5billionTM for each pilot province, but received nothing until the time that parliament shifted money to this programme to assist villagers. This money which was far greater than our expectations helped us so much..." [N1,PR,former senior health official].

Parliamentary funding approval materialized the implementation which had been delayed:

"... FM must have been implemented in the era of the 3rd plan for development (6 years ago). They (the MOH) were behind their commitments. Parliament approved the budget and forced them to implement ..." [N6,O,national union manager].

The monetary provision was also addressed by provincial managers who related it to the government:

"...we might experience some difficulties in our financial cycle, but we have been fortunate enough to enjoy governmental allocated money for Golestan..." [P1,PR,provincial health manager].

However, stakeholders were concerned whether the fund would be sustainable:

"... Parliament became a pioneer in 2005 to increase the rural insurance budget from 90billion to 377billionTM, which was raised later to 507billionTM in 2006... I could even say that parliament was the most effective factor in materializing the implementation. If it had not brought this willingness to action, we would still be nowhere..." [N3,physician,MP,member of parliament].

Besides, the MOH enjoyed the World Bank loan to renovate the PHC infrastructure in rural areas, purchase new equipment and reconstruct its transport system, which empowered the rural health centres in accommodating FM:

"...in terms of equipment, we had an agreement with the World Bank, which incidentally became effective upon the implementation of FM. This helped us to purchase most of the needed equipment..." [N8,O,senior finance official].

Both the parliamentary budget and the World Bank loan helped equip health centres prior to implementation:

"We enjoyed the World Bank loan mainly to equip health centres, particularly in deprived areas. Most of the money was spent for renovating buildings, purchasing equipment and vehicles, or building new health centres. 16millionTM was considered for each health centre to build or renovate the physical space as well as purchase almost 24 devices like ECG..." [N14,PR,former senior health official].

However, the peripheral managers and practitioners were unaware of such a loan from the World Bank.

8.5 Personnel

There was a belief that implementation of FM was facilitated, because of the ample availability of practitioners, particularly doctors and midwives:

"...GPs were mostly unemployed when the implementation started. The midwives' situation was worse, so they joined..." [L5.3,FD,family doctor].

Two and a half years after implementation, there were still no doctors in some of the most deprived health centres, while most of the country had recruited practitioners successfully. Moreover, pre-existing personnel in the health system were prepared to move forward along with the reform:

"...in my opinion, personnel in the health centres are better-organized than their counterparts across the MOH. Their cornerstone has been established very well from the early stages to move along with regulations. I am certain that the MIO had no other choice but to hand over the implementation to the MOH..." [P2,PU,provincial director].

Unlike practitioners, administrative and managerial staff were not appropriately prepared:

"...inside the MIO and the MOH, there are few experts who can analyze the reform ... even if they are asked, they do not possess the skills to do so. If you find anyone, give him my regards!..." [N5,PU,senior insurance official].

This was because of the general lack of expertise, which got worse when the new managers came to office. Moreover, a number of administrative personnel in the GDOH and the health district authorities did not proportionately increase with the peripheral

practitioners, which turned out to increase the workload for the administrative personnel with a lack of incentives:

"I think most of the FM workload is on shoulders of the PEHP. Adding two or three experts is not sometimes enough, but the PEHP is even deprived of that..."
[L2.2,DA,district health expert].

The capability of staff was a major concern, particularly because of the shortage in trained managers to run the reform:

"Apart from the structure, the body of our health system is not capable to fulfil the requirements of the reform. Decisions which are made at the highest levels with full support do not properly flow to the body...we run short of human resources, particularly ministers, and health and insurance managers with purposeful training. We appoint recently graduated doctors as district health manager, being aware of their lack of insight to their job. Once they become a bit familiar, they are replaced..." [N3,physician,MP,member of parliament].

8.6 Clinical guidelines

Most interviewees called for clinical guidelines to practice FM. Guidelines were mentioned among those aspects which must be prepared prior to starting the implementation and be of high quality:

"...managing the public within the framework of FM must be scientifically defined and distinguished. Practitioners should not be left on their own. Step by step instructions are an inseparable part of FM, which enables the paramedics to bring the medic's order into action..." [N1,PR,former senior health official].

However, the only guidelines found in the health centres were for diabetes, high blood pressure, pregnancy, and child care, which had been originally prepared for the purpose of the PHC. No particular guidelines were prepared for FM:

"...I mark the implementation 12 out of 20, because of its many failures including lack of guideline, lack of defining health services, and lack of flexibility..."
[N4,PR,national team for reform].

Doctors and other staff complained about the lack of guidelines, despite being aware of the restricting impact of guidelines on their practice:

"We are confused about the extent to which we are allowed to manage patients by our own decisions, as well as the appropriate time to refer them to specialists. For

example, the midwife keeps asking me the extent she must work up women with AUB, and the time for referring her...having a guide package for common problems assists us to be relaxed. Sometimes, I wonder to practice based on Harrison or Cecil [textbooks of internal medicine], or perform as our system fancies, which are sometimes contradictory... I think clinical guidelines are needed if we are serious about implementing FM..." [L3.1,DA,district health manager].

9 Summary

This chapter has identified five aspects of the health system environment which affected the implementation of FM:

- The pre-existing PHC;
- Lack of clear governance of health system;
- Inadequate knowledge and expertise at national level;
- Inappropriate health financial system; and
- Healthcare not a priority at national level.

First, the pre-existing PHC network in rural areas was identified a great facilitator of implementation by the majority of interviewees at all levels. It was the only available healthcare structure in many deprived villages that was accessible for many, universal implementation of Behbar was deemed to be unlikely without it. In addition, the PHC enjoyed a deeply embedded hierarchical structure that might facilitate following guidelines.

Second, the macro-level political structure was a unique system of governance internationally. Notions such as equity and anti-poverty were aspects of the revolutionary ideals which promoted FM and Behbar in rural areas. Despite this, the health system lacked a defined philosophy of governance, as a result of which there was neither a focused direction nor established criteria to assess programmes. This left the health system vulnerable to individuals' discretions, who were not afraid to overlook public benefit because of their personal or organizational interests. Lack of clear governance led to ambiguous policy making and vague operation of policies, which in turn increased hostilities between individuals as well as organizations and reduced people's faith in teamwork. Opaqueness in governance resulted in a lack of command in the health system, which meant the system was run by many drivers in different directions. No policy for change including FM could succeed in such an inconsistent environment.

However, ambiguous health governance was beneficial on few occasions. It allowed some knowledgeable policy makers to direct policy in the right directions and make a difference. A good example was the former minister of health (2001-2005) who led a small group of advocates to work on FM. His personal impact on the direction of the policy seized upon parliamentary approval of Behbar for concurrent implementation of the two policies. In addition, some sympathetic MPs facilitated the task inside parliament and opened the opportunity for implementation. There were not only national interviewees who identified these individuals' key role in implementation. In the severe lack of information and lack of explanation of the policy, even some villagers at remote areas of Golestan pointed to attempts of the former minister of health as a main facilitator of implementation. More importantly, this small group of enthusiastic players inserted FM into the 4th programme for development of Iran, which was a fundamental action to secure the policy throughout difficult periods.

Third, there were serious doubts regarding adequate knowledge and technical expertise in the two implementers: MOH & MIO to conduct the task of implementation, particularly at the national level. Critics were concerned that FM needed more experience and resources, which the two implementers did not possess, given their scarce technical facilities and poor leadership. Such concerns became stronger when some knowledgeable informants pointed to a fundamental flaw of policy making in the Iranian health sector: public policies made by individuals who had significant interests in the private sector. This led to doubts about the authenticity of policies and resulted in a loss of trust in policy makers and governmental officials, which reduced actors' cooperation dramatically.

Fourth, the funding system had a series of long-term shortcomings, which impeded any kind of reform into the health system. Despite lots of efforts for creating a National Health Account and integrating various sources in a single pool, there was no integrated health account, whereas several contradictory financial mechanisms were in place simultaneously. Apart from wasting resources, this impeded any reform which addressed equitable health services such as FM because of lack of population data base and inefficient mechanisms for pooling monetary sources. As a result, implementation of FM came to rely on the Behbar fund. Given the overwhelming concerns regarding general low capitation payment for health as well as severe resistance to integration by different beneficiary organizations, financial disintegration and lack of secure funding resulted in severe doubts regarding FM sustainability. A good example of financial failure was the insurance system, which inherited the lack of an accountable database and disintegration

of several insurance schemes. This not only wasted the resources because of the insurance overlap and financial insecurity, but also endangered equity, a main objective of the reform. Several interviewees were concerned that unless the insurance system underwent significant improvement, FM was not implementable.

And finally, in spite of sporadic support at the highest political levels to prioritize health, health was not a national priority and not the main concern of policy makers. Irrespective of strong legal grounds, such as the constitutional emphases, healthcare was seen as a window shop to obtain a variety of goals, rather than concern for public well-being or people's rights. For example, even Behbar gained parliamentary approval to be implemented in the format of FM not because of improving health but rather, as a political gesture by MPs seeking public votes and wanting to show they cared about the poor. After implementation of FM started, some MPs challenged the MOH about referral policies and threatened to suspend implementation. At time that implementation needed support, they accused FM of reducing the public's freedom of choice. They either had overlooked the referral specifications when they had verified the policy, or had not understood the nature of the policy, both indicating that health was not their concern. If they had recognized health as a public right, as the constitution states, the capitation budget for health would not have been as small as it was, a fair indicator of undermining health. Therefore, the messy health system was a result of ignorance despite apparent legal supports and key individuals' verbal emphasis. The entire political structure suffered lenses towards health as a pillar of development and citizen's right.

Chapter 8: Experience of implementation

Introduction

Policies are not necessarily executed as intended. How the policy was implemented was a consequence of interaction between the policy and the environment. The management of implementation is investigated under six headings:

- Administration;
- Cooperation between individuals themselves and organizations;
- Politics;
- Communication between individuals and organizations;
- Explanation of the reform to staff & public; and
- Auditing performance.

1 Administering implementation

In this section, six administrative aspects of the implementation are investigated:

- Registration of the public;
- service provision;
- bureaucratic payment;
- high turnover of doctors;
- medical recording system; and
- diversion of funds.

1.1 Public registration

The public had to register for Behbar log-books with the village health centre on the basis of their place of residence, without a choice of doctor. This was criticized for various reasons. Some were unhappy that compulsory registration restricted people from choosing their doctor:

“...such registration has taken away the public’s undeniable right to choose their desired doctor. One might prefer to see his own doctor rather than the assigned one. Psychologically speaking, being visited by a preferred doctor counts itself for

50-60% of the cure...even for less important daily things such as hair dressing we prefer to see someone familiar, let alone medical reasons..." [N6,O,national union director].

In addition, the process of registration was not carried out equally for the entire population in a village. Premiums varied in different periods of implementation (from 2800TM per log-book to 1000 & 700TM and free of charge after a while), which left frustrated members of village councils and Behvarzes who voluntarily undertook the administrative tasks. Indeed, the public accused the volunteers of embezzling the monetary excess (difference of 2800TM and the lower amounts):

"... the public lost their trust in us because of the registration process. People keep asking us why the premium is not constant for everyone. Our efforts to encourage the remaining population to register failed because they expected no premium. Some even thought that we put the excess in our pocket..." [L1.7,councillor].

Because of that, representatives of the public called for more cautious behaviour in making decisions, wishing no premium had been taken at all to avoid such inequality:

"...it was better either not to charge people for log-book issuance or charge them equally instead of a gradual reduction..." [L1.8,council member].

Unfortunately, the MIO's decision to gradually reduce the premium fee, which was for the public's benefit, diminished the reputation of volunteers who had enthusiastically assisted the registration. Among them were village councillors who were subsequently defeated in new council elections, because people accused them of corruption. Volunteers became critical of the reform:

"...we were the main losers of premium reductions. We are approaching village council elections, while our rivals unfairly accuse us of embezzling the difference of 2800 and 1000TM... people are enjoying the reform, but the government itself is losing...I wish it was free for all since it got started..." [L4.9,council member].

Worse still was the high number of people registered with each doctor:

"...Despite the policy emphasis to assign 2500-4000 people to one FD, there are places where one doctor is in charge of 5000 or 6000 population. To act truly as a FD he would not be able to serve more than 1000 population..." [N7,O,national insurance officer].

In one village with the 14,500 population, there were four family doctors. Because of the routine day to day activities such as village rotas, doctors could not visit their assigned population. Along with other reasons for over-utilization of services, the high number of registered people led to a high number of visits, due to which doctors were busy by delivering only curative features of FM:

"...unless the (assigned) population gets adjusted, FDs cannot provide proper preventive services...they are too busy by visiting patients..." [L2.2,DA,district health expert].

At the highest level of decision making, there were serious concerns that over-registration threatened the health focus of FM:

"...the number of visits (per doctor per day) has significantly increased from 10 to more than 100. On average, the load of visits has increased up to 3.5 to 4 times, which worries us in losing the health focus and making our doctor a vector for remedy, rather than a promoter of health..." [N12,PR,senior health official].

Doctors also complained about huge number of visits that prohibited them from undertaking social and preventive responsibilities of a family doctor:

"...we used to (before FM) replace the daily registration notebook every three years. It is being replaced every six months now because the number of patients has increased at least four times...we can do nothing but visit people and manage their diseases..." [L4.4,FD,family doctor].

Nonetheless, assigning a high number of patients per doctor was inevitable:

"...we were obliged to increase the number of the assigned population from 2500 to 4000, for three reasons. First, despite good payment, no doctor accepted to work at some places. Second, and more importantly, doctors' payment which is calculated per capita was low there that reduced their motivation. Third, there was no facility to accommodate more than one doctor in some areas ..." [N15,PU,national insurance manager].

In addition to patients' requests for referral to specialists, a reduction of almost 90% of user fees was frequently mentioned as the main reason for over-utilization:

"...many people go to our centres with no real complaint. Because it is almost free, health centres get crowded..." [P4,provincial health manager].

Ironically, in contrast to the purpose of FM to reduce drug consumption, the increasing load of visits ended in an unpredictable rise in drug consumption:

"...I have reliable figures showing that drug consumption has increased two and a half times that of the previous year...we emphasize on health by settling FD and health teams, meanwhile we fill people's stomachs with poison..."
[P1,PR,provincial health manager].

That was why provincial managers wished an appropriate tariff system and called for revising fees to prevent such damages:

"...We should not have reduced fees this much... it was highly destructive because the public think that whatever is more expensive, has better quality. One pays 2000TM to get a cab to reach the health centre, while the cost of all services including visit, tests, etc. comes to 700TM..." [P1,PR,provincial health manager].

One consequence of a high rate of visits was an increase in waiting time, particularly in single-doctor health centres:

"...the essential problem that discourages us from visiting the health centre is the long waiting time. One day, I went there at 10.00 am to collect a letter (the reason was getting a referral letter, not visiting the doctor), but the centre was closed until 11.00 am. After two hours, I was told that doctor will not be coming because of personal problems...I would prefer to directly visit the specialist to not lose my whole day ..." [L1.8,councillor].

Managerial responsibilities, attending training sessions, village rota, or simply getting sick and not being able to attend were reasons for doctors' absence, particularly in single-FD centres. There were no advance appointments to reduce waiting times and crowdedness of health centres. Managers accused the public of a lack of compliance with the appointment system. Given that the public have used an appointment system for a long time, for example to visit private GPs, such a justification was unlikely.

The final unanticipated problem that arose with public recognition was that the design, format, and shape of the insurance log-book was felt to be inappropriate for its purpose:

"I do not like the current shape of the log-books at all. They are too small with little space on the back to write down feedback..." [P3,GMU,provincial health manager].

Practical inappropriateness of use of the log-book for prescriptions was echoed by local managers, as well as practitioners. Because of the lack of space and low number of

pages, family doctors had been instructed not to write down their prescription and other requests on the log-book pages. Family doctors were only stamping and signing log-books for referrals rather than for prescriptions so no record was kept in the log-books.

1.2 Provision of services

In contrast to the 4th programme for development in which reducing governmental service delivery was emphasized, the private sector was not used much to provide services in FM:

"...we have expanded the public sector size like an octopus with long tentacles, trying to access the entire country from the north to the south. Meanwhile, its central core is disabled in handling the task..." [N5,PU,senior insurance director].

The private sector itself was not motivated to provide services in villages, because of its weak infrastructure:

"...we did not motivate the private sector to takeover administration and service provision in rural areas. To do so, the necessary infrastructure must be built up step by step, otherwise, it would not take the responsibility..." [N5,PU,senior insurance policy maker].

Therefore, the public sector (the MOH) was the only FM service provider in many places. A huge expansion of service provision by the public sector was also against the policy, which adversely affected the quality of services:

"...we (MOH) make policy, manage, plan, perform and monitor ourselves, because of which the quality drops... we must reduce our size, be more focused on policy making and try to handover operational tasks to the private sector..." [N11,PR,senior health official].

Involvement of the provincial DOH in service provision frustrated the managers:

"...we must supervise rather than interfere in every occasion. We must release ourselves from service provision and leave this task to municipalities, according to the 4th programme ... currently, I am both the performer and the auditor, whereas, I should have commissioned this out to enhance the quality of services for the public's good..." [P1,PR,provincial health manager].

The expansion of public involvement for service provision was branded against the law:

"In contrary to the 4th programme and the article 44th of the Iranian constitution, the current implementation is expanding public stewardship..." [N6,O,national union director].

One key policy maker estimated the proportion of service provision by the private and public sectors:

"...a correct analysis is never conducted in our country. The majority of central policy makers are against privatization so private views do not really exist. 80% of our outpatient services are provided by the private sector, versus 10% of inpatient services. On the other hand, 90% of inpatient services and 20% of outpatient services are provided by the public sector ..." [N7,O,senior insurance director].

Because the private sector provided a high proportion of outpatient services, they were able to manipulate the public, inducing demand:

"... The private sector is able to force us via the public. I think we have not analyzed the most powerful barrier against this implementation who are doctors, not the public..." [N14,PR,former senior health official].

Implementers were trying to reduce public provision by contracting the private sector in small cities. The proportion of such private practitioners was low, its effectiveness was not clear, and it was flawed with respect to the preventive aspect of services:

"...follow-ups and keeping medical records are not properly carried out by private doctors. Moreover, there is no assigned population to private doctors..." [L3.1,DA,district health manager].

1.3 Bureaucratic payment system

Despite welcoming pay for performance and capitation payment, the management of the payment was described as too bureaucratic and complicated which ended up in wage arrears:

"...why is the money not directly credited into the district health authority's account? If the district makes contracts, why the capitation is not directly paid to them, instead of freezing the money by numerous intermediates that considerably wastes time and leads to pay with delay ..." [L6.1,DA,district health manager].

Because of bureaucracy, some branded the current system unclear and inefficient:

"...one of the main challenges is the vague financial process. The biggest doctors' disturbance is the payment system, which has caused too much dissatisfaction. Unless the inefficient payment is improved, other fundamental problems will be inevitably occurring..." [P4,provincial health manager].

Practitioners were losing their faith in FM, because of the confusing payment system which left them unclear to how and on what basis they were being paid:

"...I was told that my earning would be around 250,000TM, but it is not clear how much goes into my pocket at the end of the month. We are paid 100,000TM every month. We shall wait up to six months, with no idea of how much is deducted, how much tax we are going to pay, etc..." [L1.4,midwife].

Practitioners, particularly midwives and nurses, as well as administrative personnel in the DOH and health centres, who were entitled to bonus payments in FM, implicitly accused the senior managers of paying whatever they liked, with no rationale. There was a common belief that the vague payment system led to unfair payments. A bonus which was meant to raise staff cooperation, ended up in their dissatisfaction, because of its unclear method of calculation and high bureaucracy:

"...they (DOH) just credit our accounts with no explanation. Although we get paid more, we are still confused as to how and why...I do not know how much I have been paid for FM. Managers decide and we can say nothing... I was told 8.5% of (the budget of) FM is ours, but we have got nothing so far (15 months)... " [L2.6,E,local health technician].

As a result of the bureaucratic payment system, the GDOH was accused of delayed payment; however, senior managers confirmed that was because of delayed payments to the DOH by the MIO:

"...there are many reasons for the delay, for example the MIO has credited the university late, because it has got the money with delay itself..." [N15,PU,senior insurance manager].

Admitting the existence of arrears, provincial managers linked it to excessive bureaucracy:

"The serious problem is that the MIO pays us with delay. As a result of the bureaucratic payment cycle, we have to pay practitioners with delay which upsets them...FM caused a huge workload in operational activities in the DOH... we conduct our audits every three months, but payments are still delayed..." [P1,PR,provincial health manager].

Complaining from the lack of authority to tackle the problem, district managers were aware of the adverse impact of arrears on practitioners:

"...we are paid with severe delays. For instance, it is almost nine months that we have only paid doctors and midwives a partial fixed payment. We finalized (payments for) the first three months, yet the remaining six months has not been cleared... we are not authorized to tackle this...one occasion the president was asked (by practitioners) to get involved..." [L3.1,DA,district health manager].

1.4 High turnover of doctors

Given the high work load, wage arrears and other difficulties, a high turnover of practitioners, particularly doctors, was inevitable:

"...we are struggling with the big challenge of a high turnover of our doctors these days. 25-30% annual turnover of doctors means that the FD is replaced every three months at some places. Immediately after the FD gets familiar with the environment, s/he is gone and everything must be repeated again..." [N10,PU,PR,senior member of national team for reform].

The problem was also the challenge for district managers:

"...one of our essential problems in some health centres is the quick replacement of doctors. We hold training sessions for FDs, spend time and money for them, teach them what to do, but they are not committed to stay. Their contract could be terminated with one month notice..." [L6.1,DA,district health manager].

Some practitioners branded the problem harmful as it brought down the public's trust, but good for doctors themselves:

"...I think lots of changes in doctors have decreased the public trust. Nevertheless, moving to another centre is good for the personnel themselves. It is exciting like moving to a new house. However, patients lose their trust in us... people get curious and keep asking why X left. Some people think the health centre is not a good place as it cannot keep its practitioners..." [L1.3,nurse].

Representatives of the public also complained that the high turnover confused villagers:

"...within the last 16 months, three doctors have been replaced here. Once people fall into the habit of a doctor, s/he is gone. If s/he settles in the village, s/he might get familiar with the customs and traditions of the public and the public could know him/her as well. Changing doctors confuses and annoys people and reduces their trust in us. They keep telling us the previous doctor was better..." [L1.6,villager].

1.5 Patient health record

There was a consensus that the lack of a patient health record put the implementation in danger, by leaving practitioners unclear to people's medical history, impairing them from properly following up patients:

"I think we have no vision for this reform. We have just provided log-books to the public. No information is taken and kept either about patients' history or their physical status...If one changes his place of residence, and inevitably his doctor, everything must be started from scratch..." [N15,PU,senior insurance director].

Because of not recording population data, the main targets of FM such as rationing services on the basis of needs, creating better chance to follow up in the elderly, and preventing repeated interventions to save resources, were threatened. A pity of many managers despite clear emphasis in the policy:

"...I regret that a small part of the 1000billionTM which was spent on Behbar (within the last 2 years), was not allocated to building up a data centre..." [P1,PR,provincial health director].

After two years of implementation, there was still no system in place to take and store population data. Despite senior policy makers' awareness about its necessity, no action was taken to tackle the shortage:

"The referral system, active and ambulatory care could not be established without recording and retrieving medical information...so far, I have seen no serious action to record people's data ..." [N4,PR,senior policy maker].

Managerial intentions and the doctors' considerable spare time during the afternoons, were two practical incentives to undertake record keeping:

"... I am warning that if we do not keep records, all efforts will be summarized in doctor shopping and treatment... I know it is time consuming, but it is doable to even tape recording each insured person's personal information and history, transcribing those, and attaching them to the (health) folders. This could be gradually completed..." [P3,GMU,senior provincial health manager].

Many doctors admitted their reluctance to record data, citing time shortages and long waiting times:

"...to be frank, health folders are not being used that much... every day I must visit 70-100 patients, most of them come along while pushing each other to get in sooner. Taking medical history and physical examination for each person takes at least 20-30 minutes, which leads to objections..." [L2.3,FD,family doctor].

Lack of time was not an acceptable excuse for many centres. With a few exceptions, the doctors, particularly in multi-doctor centres, complained about their wasted time between 12.00noon and 4.00pm, the period with least likelihood of any visits:

"...you see there is no patient after 12.30pm. One or two people might come along by chance. After 2.00(pm) no bird flies here. We just sit down with nothing to do, just to pass working hours..." [L4.4,FD,family doctor].

They could therefore divide people accordingly, invite them by appointment, take the necessary information, and transfer those to their folders, enjoying relaxed and convenient afternoon working hours. Yet, this did not happen, probably because of the lack of belief in the necessity of a recording system, or practitioners' lack of awareness regarding the importance of data recording:

"...health folder, well, what do you mean? I have just moved here. Oh, I think you mean health indices..." [L2.5,midwife].

The lack of space to keep folders was another reason given. I did not witness any doctor asking for a folder when visiting patients, even in village rotas. Despite their verbal support, national and provincial managers did nothing to improve this. Otherwise, they could have managed doctors' afternoon spare time to do so. Furthermore, they could show the importance of data recording by imposing disincentives such as financial ones. Moreover, the public were not aware of the importance of record keeping for their future managed care. Otherwise, they would have pushed doctors to record their information for their own good:

"I mark the implementation 10 out of 20, mainly because of its defective data recording. For example, pregnancy information is not recorded here at all... patients have no idea about such a health folder..." [L6.7,midwife].

Even though there was a severe lack of even manual record keeping, a number of interviewees called for computerized medical recording, a luxury without which no real FM could take place in their opinion:

"...yet, the cornerstone of FM which is creating accessible records of people, has not been established. Why must a doctor with thousands of healthy and sick people not have their information in his computer? A costless process, less than 500,000TM for each centre... folders are being written using a 50 year old model. It was not expensive for the government to equip centres with computers... it was in patients' interest by raising the likelihood of a better follow up and managed care in the future ..." [P5,O,provincial union manager and physician].

The idea of digitalized data keeping was supported by interviewees who identified the nationwide IT infrastructure capable to accommodate a national integrated database for the entire population. Some mentioned that the opportunity for digitalization was missed, and money was wasted on publishing paper folders which were never used:

"...making the right decision needs correct information. If only we had allocated a small proportion of Behbar funds to study the feasibility of digitalization (of medical records)... the MIO spent a hell of an amount of money to publish millions of health folders... If only they had allocated this to computerize the process..." [P1,PR,provincial health manager].

Golestan completed a project on its own to create an electronic database for the province. However, digitalized data keeping was not nationally spread:

"...There was not an IT approach to the reform at a national level, otherwise all (provinces) would have moved towards it. Some provinces have been developing their own software, which are not necessarily compatible. Just imagine integrating those. Impossible, hell of an amount of money again..." [P5,O,provincial union manager and physician].

Lack of record keeping diverted the implementation from one of its crucial aims: active follow up. Lack of computerizing the process wasted money, time, and human resources. Quality of care came down and the management of chronic patients was affected. The administrative costs of issuing insurance log-books (57billionTM so far), could also be saved by computerization and giving people their unique insurance number:

"...if we had looked at FM and referral system through an IT lens and the necessity of digital medical record, insurance log-books would not be our initial concern... we probably would not need such log-books..." [P3,GMU,senior provincial health director].

1.6 Diversion of funds

Interviewees identified a number of occasions on which funds for FM were diverted to other purposes. Even senior national managers were concerned about the possibilities

that the medical universities might spend the FM budget to resolve their outstanding shortages:

"I am always worried that due to thousands of problems, chancellor of universities or local managers spend money for other purposes (than FM)" [N1,PR,senior former health official].

The existing bureaucracy was seen as a facilitator of potential misallocation:

"...what worries me are managers who use the (FM) money to solve their current problems and do not care what happens next... the universities' accounting system is flawed. Money is credited into the university's account, where 10% of it is immediately frozen. It is transferred to the account of the deputy of logistics then and released whenever they would like to..." [N2,PR,senior health official].

Medical universities were likely to divert funds because they were struggling to pay their routine expenses, like the salary of their personnel:

"...Universities are suffering from a severe budget deficit due to which they cannot afford even their routine commitments. This inevitably means that a significant portion of FM resources is spent for irrelevant purposes..." [N4,PR,senior member of national team for reform].

Officials in the Golestan University disclosed their inevitable choice to divert funds:

"...my current disturbance is my personnel's postponed salary for last month. How could I even think about FM? I have no choice sometimes but to shift FM funds to somewhere else for relief or tailoring..." [P3,GMU,senior provincial health director].

The MIO also spent parts of the funds for other purposes. It kept part of the approved budget with no declaration. Parts of the budget which were being deducted according to the monitoring results were not declared as well:

"...the budget for this year was increased, despite the fact that nothing has been done. The MIO spent part of the money for other purposes (than FM), however, the parliament trusted it (approving next year's budget with 10% increase)..." [N5,O,senior insurance policy maker].

2 Cooperation

Despite a few examples of reasonable cooperation among stakeholders to implement the reform, there was a consensus regarding the adverse impact of a lack of cooperation on

implementation. Establishment of "The National Office for FM" in the MOH was intended to encourage cooperation:

"...national office for FM: NOFM is to theoretically feed the implementation, as well as to coordinate stakeholders' function by conducting surveys, integrating resources, documenting histories and improving macro plans and strategies. The aim is to prepare a well-done action plan for executive units..." [N10,PR,national team for reform].

The office was formed six months after the new government took power. Headed by a well-known and reputable policy maker who was passionate about FM as the senior advisor to the minister, he tried to revitalize the reform. The office organized several specialist committees to work on various issues in a professional manner:

"...this office is a new experiment within the DOH that enjoys the advice of professional committees, working on various issues including drugs, clinical guidelines, medical recording, etc... I expect to experience a smoother implementation through its outcome..." [N11,PR,senior health official].

One good impact of its activities was engaging with key stakeholders who had previously been neglected despite their desire to cooperate. Organizations such as the GPA (General Physicians Association) and the IMA (Iranian Medical Association), which respectively represented GPs and all doctors (including GPs), were invited:

"Following recent interactions between the GPA and the MOH, we organized sub-committees within the main committee for FM in the GPA. Headed by one of our most experienced managers, its mission is bridging the gap of influential data. That guy has gathered 15 authentic managers and researchers with great experience from the PHC networks. They attempt to find out better ways for implementation, consistent with the MOH goals... their role is advisory, not executive. We also convey doctors' opinions to the MOH...everything is done for assisting them to perform a better reform. We do this, even if the MOH stops us to do so..." [N6,O,national union manager].

Legal improvements in practitioners' contracts were unlikely without close cooperation between the MOH and unions like the GPA and the IMA. The cooperation converted the anger of opposite key stakeholders to a more productive environment. Moreover, the GPA considered itself an advisor to the MOH in implementing the favourite policy of the MOH with no executive interference.

Nonetheless, after a couple of golden months, the head of the NOFM resigned because of frustration and lack of ongoing cooperation. The office had not been effective since then.

The rest of this section investigates the aspects of the lack of cooperation and its impact on the management of implementation under six headings:

- Degree of common language
- Their interpretation of goals
- Coordination
- Mutual trust between stakeholders
- Advocates of FM
- Coalitions and policy brokers.

2.1 Lack of a common language

For many reasons including the lack of preparation, a top-down approach to the policy and following different goals by stakeholders, there was a lack of a common language between the implementers:

"...common language among various engaged levels is perhaps 30-40%! Because they have not been trained, they did not know what to do. Many think that FM is to decrease costs..." [N2,PR,senior health official].

Even national senior policy makers had contradictory interpretations regarding the fundamental concepts of FM:

"... a common language has not been effectively in place. The referral is cited more than other aspects of the policy. There is not a united and deep understanding of FM and its differences with referral..." [N2,PR,senior health official].

Lack of a common language was serious enough to be listed as the main obstacle to implementation by many interviewees:

"Our interpretation from FM is not united at all. Dr. X does not interpret it as I do. The public approach is different from Dr. X and me as well. Moreover, Dr. Y and Dr. Z's approaches are different from Dr. X and mine. We are not even united in our main aims, let alone the strategies..." [N5,PU,senior insurance manager].

2.2 Inconsistent interpretation of goals

The goal of the reform was unclear to many key stakeholders, which resulted in contradictory interpretations:

"The overall opinion is moving ahead with the reform, but we are facing different approaches within which everyone is pursuing his own goal, contradictory to others sometimes. I think the most vital task is clarification of the main goal... it is very important at this stage to write down the main aims and have it signed by all the stakeholders..." [N12,PR,senior health official].

Lack of transparent goals was identified as the core reason for the diversity of interpretations of the policy:

"You will reach this crucial result that lack of transparency caused all these problems. It led to weak political commitment, led to the GPA to stand against implementation, despite its benefits, and resulted in lack of a common language. I wish you would investigate why goals are not clarified in developing countries like ours?..." [N4,PR,senior member of national team for reform].

Several examples were mentioned to show the diversity of goals, which were not necessarily contradictory, but were stopping the definition of a suitable strategy to fulfil them given the scarcity of resources to simultaneously pursue all the goals. For instance, the MOH was accused of looking at the reform as a resuscitator of the rural health networks:

"The MOH's first priority was not implementing FM, it was to revitalize the rural health networks...monetary resources of Behbar were used to obtain personnel's bread..." [N7,O,senior insurance policy maker].

The perception that the MOH's priority was not to implement FM in villages was also supported by officials inside the health sector:

"...we formatted many things to convince the MIO to credit us the money. We are not doing anything more for patients in FM..." [P3,GMU,senior provincial health manager].

Because of the diversity of interpretations of the policy, the MIO and the MOH faced many challenges in implementing FM:

"We did not expect this amount of money from the parliament. We were promoting rural insurance plans to provide villagers with insurance log-books like that of the city residents, to go wherever they prefer. We were not thinking of referral in the MIO..." [P2,PU,provincial director].

Mandatory concurrence with Behbar shifted the focus to the rural areas, which in turn caused diverse approaches towards implementation:

“... there is no united interpretation of the policy among stakeholders... for us, FM was a health unit, lead by a doctor to deliver a wide range of services including social and spiritual, as the WHO defines. Dr. X was looking on referral and FM as a GP fund holding like the UK. His approach was not in line with his professional experts... the lack of common language within the macro level of decision making impaired the lower levels to reach common results. This is why despite decades of referral system in this country, we are still nowhere...” [N8,O,senior finance officer].

Fundamental variations in interpreting FM also led to selecting unsuitable strategies to fulfil the aims of the reform:

“... after lack of a common language, I think the second biggest barrier in front of the reform was the wrong strategies for fulfilling our goals...” [N15,PU,senior insurance director].

Even the two dedicated policy makers, whose efforts were significant in shaping the implementation, had contradictory approaches:

“I criticise Dr. X (the former Minister of Health) because his interpretation from FM was in contrary to his closest ties, even his deputies. In particular, Dr. Y (his deputy for health) had a different interpretation of the policy...” [N10,PU,PR,national team for reform].

The core reason behind the implementation failures seemed to be following the diverse perceptions of the goals of the policy. The Behbar goal was to narrow the gap between villagers and the urban population in terms of equity and entitlement for services, whereas the goal of FM was health promotion. Thus, the two policies were being implemented with different macro expectations:

“... the main goal of Behbar was not health, rather it was social insurance for villagers as the responsibility of the MWSS. Because people themselves distinguish their own needs, health and treatment were considered as a window-shop...Parliament changed many things by approving the budget for Behbar over a night. The MOH faced that amount of money, which was about to destroy all its visions...” [N7,O,senior insurance policy maker].

Parliament approved the budget which surprised the MOH whose attempt was to implement FM for urban households. The view of parliament was the opponent of the MOH, whose aim was to bridge the gap of primary care in cities and ration services there, where the majority were insured. On the other hand, the parliament's aim in Behbar was to give the same freedom to villagers as their urban counterparts and bypass rationing. This

was why parliament objected to the implementation soon after it started, accusing the MOH of taking away the power of selection from villagers:

"Parliament approved the budget to take away differences between rural and urban inhabitants. Look! Parliament was wrongly thinking, looking for a tool to give freedom to the villager to do whatever s/he wants....they bypassed us (with emphasis). Parliament allocated money for villagers not because of FM or referral, but equalization of rural and urban insurance... this was why the money was allocated with no calculation and rationale behind. We always get worried once big money comes in, because big money is always spent unrighteous ..." [N8,O,national finance officer].

Managers in the two organizations explicitly admitted that different goals were followed:

"The truth is that our desire in the MIO was villagers' social insurance. We started to distribute 18 million insurance cards in the Rafsanjani (the Iranian president 1989-1997) era in 1996 in Kerman province (south of Iran). People's interpretation from Behbar there is nothing but replacing Rafsanjani's (the former president 1989-1997) cards with Ahmadinejad's (the Iranian president 2005- present) log-books...our aim was promoting cards to log-books!..." [P2,PU,provincial director].

The two main implementers approached the reform with opposite goals and different agendas. The natural result of such a difference was failure and instability. Worse still, they did not even recognize each other to carry out the common task of implementation:

"When parliament approved our budget (he considered the budget just for the MIO) and showed us the green light, we invited the MOH to join. Dr. X (the former Minister of Health), and Dr. Y (the former head of the PEHP) had tried their best, but they were still nowhere after three years..." [N10,national team for reform].

On the other hand, the MOH did not approve such a role for the MIO and denied its effective function in the implementation:

"... it is easy to say, but it was a lot harder in practice to convince parliament to allocate money for this purpose. Such concepts are absolutely irrelevant to the MIO. Is the MIO stupid to do so? If the MIO says it has done this (Behbar), is has done something against the nature of insurance, which is saving resources to prohibit more cost..." [N14,PR,former senior health official].

The important missing effort by the two implementers was creating a mutual relationship in favour of proper implementation. Instead, they denied and accused each other:

"If I had authority, the first thing I did was to establish an authentic relationship between the MWSS and the MOH for execution..." [N11,PR,senior health official].

As a result of following different goals, the implementers' cooperation was lacking. They were accused of not spreading FM, even across their entire sovereignty:

"...you cannot undertake the reform when health is just the issue of four people who have sat down in a room with no connection to the outside world, even the entire ministry (of health). Until it becomes a national apprehension, FM will not succeed..." [N7,O,senior insurance policy maker].

2.3 Lack of coordination

Lack of command harmed the implementation in Golestan, despite cooperation between the GDOH and the GMIO who were more coordinated than their national mother organizations:

"We have been in good harmony with the MIO, despite some misunderstandings at the start. Now, we have reached a common language...I think our constructive interaction facilitated the proper implementation in our province..." [P1,PR,provincial health manager].

"...the GMIO and the GDOH were in charge for planning, resource provision and performance, although they had multiple command centres inside them. They pursued their own plans most of the time ..." [P2,PU,provincial director].

Almost all interviewees in the two provincial organizations identified the organic and prosperous relationship between the two as the main facilitators of what they viewed as the relatively successful implementation of FM in Golestan:

"...the MIO and the DOH are enemies in many provinces. We both liked this task to be done and sincerely supported each other for productive interaction..." [P2,PU,provincial director].

Practitioners and the public were aware of the cooperative relationship between them, mentioning the smooth process of issuing the log-books as an indicator.

Lack of cooperation and command caused coordination failures in the management of implementation:

"...this system is dissociated. It is better to say there is no system in place. There is no land to be governed and no organization to link the separated islands. Each single organization is working for itself..." [N7,O,senior insurance officer].
"...the essential command to move the reform forward has not been yet established in the system..." [N4,PR,senior member of national team for reform].

The implementers could not establish a designated unit to coordinate the implementation because there was no common language between them:

"...due to lack of united interpretation, no referral was executed, despite more than a decade of legal emphasis on it. There is no specific unit responsible for health.... everyone says that referral is good, but its implementation is challenged because of restricting freedom of choice..." [N15,PU,senior insurance director].

This was why senior officials called for coordination via a single and integrated management of the implementation:

"... I reemphasize that if we are serious in reaching goals, there must be a united management to prevent personal interpretations and wrong directions..." [N12,PR,senior health official].

There were two important aspects of the lack of coordination: the separation of the purchaser (MIO) and the provider (MOH), and gate-keeping role of family doctors

First, despite theoretical support for the separation of purchaser (MIO) and provider (MOH), it harmed implementation. In practice, they suffered a lack of coordination because of their different goals and diverse interpretations of the policy:

"One of our big challenges is that I (MOH) have to take responsibility, while money is in the hand of the MIO. We disagree even on commonplace issues like the drug list. If I am the policy maker, I must decide about the drug items.... It is really a problem that the MIO can do everything without our approval. Our objection changes nothing, because it possesses the money. We cannot resolve all disputes with friendship and ceremonial greetings..." [N2,PR,senior health official].

The fragile teamwork and the two implementers' perception of each other contributed to the problem. It was particularly difficult for the provider to accept monitoring by the purchaser to get paid. The MIO used to be part of the MOH, prior to moving to the recently established MWSS, so the MOH was still looking to the MIO for obedience which it found hard to accept. The MOH approach to the reform, which was revitalizing the PHC in rural parts, was interpreted as diverting from Behbar by the MIO, resulting therefore in little impact despite spending such huge amount of money:

"550billionTM was a huge amount of money which could explode our system, although I do not see signs of such success in our performance..." [N3,MP,member of parliament].

Separation was not as beneficial as expected for two reasons. First, the curative focus in the MIO:

"...it was difficult convincing the MIO to pay for primary prevention. It only accepted to pay for secondary services...it took ages to gradually adopt itself to not just pay for treatment, but for health..." [N1,PR,former senior health official],

And second, the previous hierarchy of the MOH, in which the MIO was subservient:

"...conflict between senior managers to materialize their organizational portion (of money) was serious... it was hard for the MOH to accept a commander who was its ordinary soldier (MIO) beforehand...the MOH lobbied the parliament to dissolve the MWSS to take over the MIO as its subordinate again..." [N5,PU,senior insurance director].

Furthermore, the two organizations undertook parallel activities, which wasted resources and lowered efficiency. For example, the MIO did not accept the MOH audit checklists, but used its own with different criteria, believing that was increasing the quality of services:

"...I accept that once upon a time treatment was our focus (MIO), but we have changed. We share results of our own audits with colleagues in the DOH. Well, who likes to be monitored? One must appreciate the approach that we follow in our audits. We monitor to increase the quality of services, and to enhance public's satisfaction by improving performance... we just feed the DOH with data to encourage them to provide better services..." [P2,PU,provincial director].

The MOH had many reasons to be unhappy with the MIO, whose attempts were to prove its true independence by influencing the reform. This was why, despite theoretical support, separation ended in the implementers' dissatisfaction:

"...in practice, the MOH does not recognize the MWSS. These two bodies used to be one. It was decided to separate the purchaser from the provider to increase their mutual interaction, and to enhance the competition for increasing quality of services. However, the result was adverse..." [N7,O,insurance policy maker].

Addressing the general problem of weak cooperation in Iran, an experienced policy maker blamed the split and branded it a barrier to proper implementation:

"As a minister who has been working with a number of prime ministers and presidents, I was always against the efforts to separate welfare and insurance affairs from the MOH. The recently established MWSS was proposed several times in Mr. X's era (PM 1982-1989). I objected the proposal, not because I was centralized or selfish, but I knew the weak inter-organizational cooperation in our

country... honestly, if I become president one day, I would reduce the number of ministries...the more ministries we have, the worse service we deliver... I have seen no positive impact of this (separation). If we had a right system and proper administration, different organizations could monitor each other activities... the only result [for separation] is stopping or slowing progress...if I was the minister [of health], I would merge the MWSS into the MOH ..." [N9,O,senior health official].

The second aspect of the lack of coordination was the referral and gate-keeping role of family doctors. Some mentioned that there was no defined referral cycle in place with specialist doctors and hospitals not prepared to accommodate the referred cases:

"The current big challenge is the lack of coordination with second level (of referral) practitioners, most of whom do not provide feedback for FDs. As long as patients queue behind specialist clinics, and insurance companies immediately reimburse them in cash, why should specialists cooperate..." [N10,PU,PR,national team for reform].

Although specialists were contracted to accept referrals, their relationship with family doctors was not coordinated:

"...specialist have been identified and contracted, but not in a coordinated manner. There is no organic relationship between FDs and specialist to exchange feedback..." [N11,PR,senior health manager].

Referral to secondary and tertiary care was difficult due to the lack of specialists in many towns, transport difficulties and lack of a defined pathway for referral:

"...there is not a coordinated referral system in many cities for referred villagers... many patients are asked in hospitals to pay, or their Behbar log-books are refused (despite contract)...many cities have no specialist. People have to commute to other cities across the provinces or even to neighbouring provinces to seek their needs..." [N3,MP,member of parliament].

Some patients were confused and dissatisfied, mainly because of the lack of coordination with secondary care:

"...my father needed a prostate surgery. The FD referred him to a SSO hospital. They kept him waiting for long and told us there was no more appointment left in that hospital, however he might be admitted in a private clinic. They also asked for 100,000TM extra (normally such operations cost 20,000TM for patients with a Behbar log-book), on top of the expenses, as the surgeon fee. They refused to do the operation if the money was not paid..." [L1.8,villager].

Even senior managers in the MOH accused the current referral pathway of promoting treatment rather than health:

"...this referral trajectory mostly promotes treatment not health, by referring patient to a doctor who just cures. Apart from a letter of introduction, no relationship is established between FDs and specialists. The referral itinerary has not been organically designed to employ feedbacks for improving FDs' knowledge about necessary future follow ups..." [N12,PR,senior health official].

People were also not clear about the requirements of referral, and were either annoying doctors with their irrational requests or insulting them:

"On average, I refer 15-20% of my patients. To be honest, I do not know myself why I refer some of them, whom I do not visit and their relatives push me for referral. Many times a man comes along with his wife's log-book in hand, asking for referral to a gynaecologist. Elderly or kids are other examples... I resisted doing so in the beginning, but I was insulted many times. I do not argue with people any more..." [L2.4,FD,family doctor].

Lack of public explanation about the necessities of referral had two side effects: a high proportion of referrals and retrospective referrals (being visited by a specialist first and visiting FD next, just to get the insurance log-book stamped to enjoy the financial benefits of Behbar), each of which was endangering gate-keeping:

"... the high rate of referral to secondary care was a big problem within first months until we considered its percentage in evaluating doctors' performance..." [P1,PR,provincial health manager].

Retrospective referral was accepted in the early stages in order to respond public expectations, which turned out in lowering specialists' trust in the referral system:

"We are not permitted to prescribe for patients who have not been referred (by FDs) nor do anything else with the Behbar tariff, however, this system is flexible enough to authorize whatever people want (even by breaching principles of gate-keeping). They come and see us first. When we tell them that we are not permitted to prescribe without being referred by a FD, they go back to their village, get their log-books stamped and come back to us again..." [P5,O,provincial union manager].

Some patients set up appointments with surgeons before visiting the FDs and then argued with the FDs who resisted stamping their log-books. Doctors were angry, seeing their dignity and authenticity under threat. Unfortunately, the higher officials did not support FDs to perform proper gate-keeping in such occasions:

“...the MIO has damaged our reputation before the public by its dual standard. It makes contracts with specialists and give log-books to the public on one hand, while family doctors are forced not to refer more than 10% of cases ...”
[L4.2,FD,family doctor].

Senior officials tried to legitimize their overlooking referral bypass so as to retain MPs' political support:

“By law, we are not allowed to accept retrospective referrals, although we are politically obliged to do so to prevent villagers complaining to their MPs that might end up in their lack of support and failure of implementation...” [N15,PU,senior insurance manager].

Given their preference for specialists, the public interpreted FM as a voucher to visit specialists cheaply. They also had other excuses for bypassing referral including lack of drugs, long waiting time, etc:

“... the lack of drug is the reason that forces people to go to cities (visiting specialists) first. Sometimes they have to waste half of the day to get their drugs, because the village pharmacy does not have many prescribed drugs” [L6.8,imam].

In addition, specialists themselves were accused of inducing retrospective referral:

“...specialists are our big challenge. Not only do they not provide feedback, but they also facilitate retrospective referral, which raises patients' expectations and challenges the FD's relationship with upper levels. They teach patients to do so, assuming our FDs are secretaries...” [L2.1,DA,district health manager].

2.4 Lack of trust

It was difficult to identify whether individuals did not trust each other because of the system, or lack of cooperation led people to lose their trust in each other. Lack of trust harmed cooperation and was apparent even at the highest levels of policy makers:

“The MOH's proposal to the SSO, the MIO and other insurers for monetary integration was refused because of serious doubts about the correct spending...for example, the cabinet decided to implement a referral system in Bam [southern city] in 2003, following a very destructive earthquake. The SSO paid 500millionTM in response to the government request. Not only the programme was not implemented, but also the SSO lost premiums for its own insured clients there. How could the SSO trust in the other MOH's plans anymore?...” [N7,O,senior insurance policy maker].

Furthermore, lack of trust between the two implementers delayed the macro level agreements, which ended in wage arrears:

“... we did not reach an agreement between the two ministries, because of not recognizing the other side position. Our different interpretation from the MOH, affected the operational phase...” [N15,PU,senior insurance manager].

In 2007, the annual cooperation agreement between the two ministers was not signed until month seven of the new Persian year. Finally, a vague and confusing agreement was signed by their deputies. In 2008, six month into the New Year, the contract had not been signed. Reaching agreement has been difficult because of the contradictory goals by the two implementers:

“It was hard to get the signature of both ministers [of health and welfare] for a common document. Sometimes we spent a night at a ministers' home arguing the quarrel issues. Some agreements were finalized at 4.00am ...” [N1,PR,former senior health official].

Lack of trust was not restricted to governmental bodies. Doctors also did not trust the government and its plans. The reason was the ongoing loss of status, despite their expectation to revitalize it in FM:

“...I do not trust either the current or the former government. Doctors are intellectuals who act as leaders and prophets of health. They deserve more merit. Look at football players, many of whom are illiterate, but are significantly more respectful... if health is their [the MOH's] desire and they understand doctors' role, why don't they allocate a small portion of the budget for promoting sport championships to practitioners' well being? ...” [L6.9,FD,family doctor].

They did not trust the government because of their working conditions:

“If the government is honest to support FM, why it considers no security and basic welfare for me as the service provider?...I do not expect a big bang. If they leave everyone alone, people could manage themselves. I do not want their sympathy which puts everyone in trouble...” [L1.2,FD,family doctor].

Some doctors even accused the government of intentionally diminishing their dignity:

“...I think this policy was introduced to diminish doctors' position (with emphasis). This is done intentionally...the whole society is corrupted, but the embezzlement in health [DOH and MOH] is the worst...” [L2.4,FD,family doctor].

The MOH officials and the MPs as legislators were accused and hated therefore:

“...what the government is doing is just a mistake, tell the minister (of health) on my behalf. I do not know why doctor MPs are there? Are they qualified enough?...the deputy of health is determined to keep doctors' blood into the bottle...these people want to make us as bakers...” [L3.3,FD,family doctor].

The MIO and the MWSS were not separately addressed here, because they were not in a direct relationship with practitioners. It was also not clear for many that they had recently been separated.

2.5 Lack of advocacy

Lack of cooperation deprived the policy of effective advocacy. Even the national senior officials recognized the lack of advocacy by local practitioners:

“... we presented the policy only to one level of staff in four selected provinces. The chancellors of universities, even their deputies other than health in (medical) universities were not engaged, let alone the practitioners. That is why; they did not consider the programme as their own property...” [N11,PR,senior health manager].

The DOH in Golestan tried to involve influential managers:

“...attempting to sensitize the public, we put FM at the top of the agenda in the university (Golestan) Board meeting. We also discussed the issue in the committee of health before the provincial governor and senior provincial managers. We used all chances to promote the policy for influential people...” [P1,PR,provincial health manager].

However, the effectiveness of such initiatives was poor with a lack of even a basic understanding of the policy and awareness of implementation. The chancellors of medical universities, even in the four selected provinces for pilot studies, were not aware of FM prior to implementation:

“I was not aware of FM at all. If they had told me, my advice was to start implementation from cities [rather than villages]...” [P3,GMU,senior provincial health manager].

The university chancellors were reluctant about FM, which irritated the national officials:

“...yet, universities have not accepted the implementation (of FM) as a task which must be undertaken. They do not believe in FM so are reluctant to contribute to this revolution. Some look at FM as the money to relief their shortages...” [N2,PR,senior health official].

Better advocacy was going on at the local level. Some villages had established a committee for FM to encourage the public and their influential delegates:

"We established a committee by inviting trustees since implementation started... the Islamic Council of the Village was very cooperative... we facilitated the registration phase by undertaking administrative jobs ourselves..." [L1.6,councillor].

District managers were positive about the function of such councils:

"...we have a close relationship with the Islamic council of the villages which links us to the public. Their meetings, which are held in mosques, make us accessible to the public." [L6.1,DA,district health manager].

The locations of meetings were mosques on many occasions, which was helpful in building a close relationship. Given public religious beliefs, gaining the support of people in mosques, particularly when Imams who had spiritual influence, encouraged the public. For instance, Imams' emphasis motivated many households to register in the scheme:

"...I was asked to encourage people to register with Behbar. I did so on one of the Friday prayers, which rushed folks towards the health centre..." [L4.9,imam].

2.6 Lack of coalitions

As a result of the lack of collaboration, advocacy, and the aforementioned individualism which lowered cooperation, no real coalition was established to promote implementation. Gaining stakeholders support for the policy was not that successful:

"...it took three years to convince some policy makers and legislators to listen to us; it was not promising after all..." [N14,PR,former senior health official].

Forming coalitions was difficult because of key people's opposition to the policy:

"...among people whom you [the researcher] might have interviewed, many key actors are essentially against FM. I might use the media to challenge them, but we have not established a real coalition because of key people fight. We were minority in FM, but the majority of powerful stakeholders are against the policy, despite their oral agreement..." [N5,PU,senior insurance policy maker].

Even though most interviewees approved the FM policy, this person who has been working closely with many of the other interviewees for a long time recognised their disagreement. It was difficult to consider this as deviant for three reasons. First, position,

knowledge and character of the interviewee, who was fully aware of many confidential issues. Second, the messy reality of implementation because of mismanagement. And third, not only was no real coalition formed, but actually the degree of cooperation, even between the main custodians like the Deputy of Health, was too low to allow the formation of further coalitions consisting of journalists, social activist, MPs, etc:

"...if the implementation is serious, the highest manager must replace whoever in the MOH, the MWSS, or the MIO that is not in line with the reform with someone who agrees with FM and its strategy..." [N10,PU,PR,national team for reform].

In such a fragile situation, the opponents' coalition to slow down the implementation was easily formed:

"...some believe that FM is not doable in Iran. In our last meeting, because I knew that some people were certain to diminish FM, I even challenged a key member of the executive team who believed that FM cannot grow in Iran at all. I warned him that it is such hypocritical approaches to FM that has prevented its execution so far..." [N13,PU,senior insurance director].

Opponent coalitions tried to discourage MPs about the reform:

"...we are still worried that parliament stops supporting the reform. Some united opponents are lobbying MPs, warning them that by implementing FM their wives must visit a GP for gynaecologic complaints, or their kids will be only visited by a GP which avoids them from appropriate..." [N15,PU,senior insurance manager].

Opponents emotionalized MPs by stressing the limits of rationing, particularly for children and women. Therefore, the referral strategy with its underlying rationing nature was the subject of argument, not the FM policy.

Nevertheless, implementation benefited from effective policy brokering in parliament between the implementers:

"...within the last two years, a number of meetings were held by parliamentary commission of health to mediate arguments between the MOH and the MWSS. There have always been misinterpretations about who is responsible for what, etc. In addition to being prominent in financing the reform, commission of health has interfered many times to bridge the implementers' gap... ..." [N3,MP,member of parliament].

The majority of interviewees verified the facilitating role of the parliament in policy brokering.

3 Political management of implementation

Political management of the implementation is considered in this section under four headings: politicisation of the reform; governmental support; centralization; and rushed implementation. Predictably, political features of the reform were mainly addressed by the national interviewees and to a lesser extent by regional managers. Villagers and their representatives were almost unaware of the politics behind the health system and this particular reform.

3.1 Politicisation of the reform

Almost all national interviewees considered the reform highly political. Some felt politics was the start and the end of everything in Iran:

"...this country is the place of political considerations. The only goal of everything is political interest. For instance, if labour unions realize they could promote their requests by blowing into the referral trumpet, they would so, otherwise, they diminish it..." [N7,O,senior insurance policy maker].

Political considerations resulted in the vicious circle of ideological preference and waste of resources:

"...sad to say, because changes are very political in our country, their effects are diverse and significant. It resembles a computer that loses its entire memory, all data must be re-entered..." [N4,PR,national team for report].

Personal political views influenced the appointment of managers, rather than their competence:

"...in our country there is not the structure that determines outcomes, but rather individuals' personal benefit is more important. Positions are defined for particular persons in Iran, rather than qualifying people to get positions... an organization is established to accommodate a person because of political benefits..." [N5,PU,senior insurance policy maker].

Side effects of such an approach have been many. The most paralysing one for FM was managers with multiple jobs, which ran short of time to lead the task:

"... the head of the office for reform [in the MOH] is Dr. X. If you could see him once, convey my regards to him! The first secretary to the office is Dr. Y who is the

manager of... in Z [another country]. How could such (busy) individuals handle the reform? ..." [N13,PU,senior insurance official].

Political preferences to appoint managers resulted in job insecurity, which turned out as the main reason for demanding multiple jobs:

"...many people have multiple jobs because of insecurity. In case they lose one, they might survive with another ..." [N7,O,senior insurance policy maker].

The inevitable result of multiple positions was depriving others and threatening meritocracy:

"I believe in FM, but I think it is being improperly implemented, because suitable people are not in the right positions to run it...more deserving people do not run things, because of political reasons...management is not difficult if the most foolish persons are not appointed as managers..." [L2.4,FD,family doctor].

FM was branded as a field for political game. The policy was seen as fulfilling the interests of politicians, rather than the public benefits:

"Our politicians ride on the public's vote to abuse power. They set long-term benefits of the public aside to fulfil their own short-term goals...long-run advantages of the public are sacrificed to buy their short-term satisfaction..." [N5,PU.senior insurance policy maker].

3.2 Governmental support

The concurrent implementation with Behbar was seen as being in line with the strategic aim of the Islamic revolution: prioritizing service delivery for rural and deprived areas:

"...almost 25% of our population live in rural areas, providing services to them is more difficult than their urban counterparts. However, serving the poor in whatever possible way has been a strategic motto of the Islamic Republic in the last 29 years. We used this benefit to attract stakeholders support..." [N1,PR,former senior health official].

Revolutionary beliefs and justice ideals assisted in building the policy and promoted the idea of using the PHC as media of services. Such ideological views were so strong, opponents were branded neo-liberal or neo-classic, both with negative political overtones:

"... FM is conforming to the justice ideals of the Islamic Republic. For instance, the PHC success was mainly because of specific features of the revolution. Otherwise,

it would be impossible to hold a system, in which a Behvarz was in charge of 70% of doctor's job... passionate followers of the revolution would love such a system [FM], because of the possibility of fulfilling one of its main aims: equality... otherwise, they did not support policies which are rooted in neo-classic and neo-liberal movements..." [N4,PR,senior member of national team for reform].

Key policy makers explained how they manipulated justice to promote the policy:

"In developing countries with lack of defined standards, many things rely on individuals. We were riding on the wave of justice and accessibility and availability of services, through which we brought stakeholders in line with the plan... social justice as the strategic motto of the revolution was matched with FM..." [N14,PR,former senior health official].

The parliament supported the implementation in different ways, in addition to approving the budget for FM. Its support was consistently acknowledged as essential to start and run the implementation. The Commission for Health in the 7th parliament had an extraordinary facilitating role:

"...the political commitment of parliament moved and assisted us a lot.. having a bullion, you are able to walk. Otherwise, , power, management, and knowledge are useless..." [N14,PR,former senior health official].

Implementation started in a transitional period of power hand over from a reformist to a ultra-conservative government. The new government was seen as supportive. Social equality was mentioned as the main priority by the new president, whose administration inherited the implementation:

"...the president believes in social equality a lot. Even though I did not vote for him, I am happy he was elected because of prioritizing justice... all presidents have been emphasizing equality, but it is a core for Ahmadinejad" [N9,O,senior policy maker].

Interestingly, the president himself was cited in most quotations, rather than the relevant organizations:

"...taking into the account the president's concentration on health and treatment issues, if we provide a good plan for the reform, we would get his support" [N8,O,senior finance official].

The new government's focus on health was also addressed by the regional managers:

"...improving health facilities was the main focus in the cabinet provincial trips. 15billionTM was spent for equipping hospitals in our province ..." [P8,O,senior provincial stakeholder].

Nevertheless, although their perception of political support was somewhat inconsistent, the interviewees addressed the lack of governmental commitment in critical situations. The political system was accused of not properly supporting the policy. Even members of the cabinet accused the government of not prioritizing health:

"...health has never been the government priority. You see nothing about health in their reports and proposals..." [N14,PR,senior former health official].

Senior officials were accused of not supporting managers to overcome barriers:

"We suffer from the lack of authority in this implementation. It is very important that managers know they are spiritually supported by senior people. In a big programme like FM, shifting the scope from organization to the nation would restrict the opposition and strengthen the implementation..." [N15,PU,senior insurance manager].

Policy makers were accused of not supporting FM as a national priority, due to which the essential cooperation at local level was difficult to achieve:

"Lieutenant- governors or district authorities must officially instruct village councillors to undertake their defined responsibilities in FM. Councillors are not linked to the health system, which makes us unable to force them to undertake their relevant tasks... such agreements must be held in upper levels..." [L2.2,DA,district health expert].

As a shortcut to prioritizing the reform for the current government, the minister of health was seen as so trustworthy and close to the president that his influence could attract the presidential support:

"The minister [of health] must promote the intention of the health sector reform from a small cycle within the ministry, to a national firm purpose. His close tie to the president would be facilitating this ..." [N7,O,senior insurance policy maker].

The fact that the new government did not improve the implementation was interpreted as its unwillingness, in addition to its lack of expertise and knowledge:

"My experience after 18 months of working in this government is that they are not afraid of making surprises over a night. They are stupidly that obstinate to suddenly

make a decision... the problem is that they do not believe in the policy ..."
[N5,PU,senior insurance policy maker].

The new government inherited a policy which was not likely to be its priority. Governmental change had two consequences: accusations and change of personnel.

First, although the newly appointed minister of health confirmed from the very beginning that FM would be the priority for the MOH, in practice the MOH did not enact such a prioritization:

"...a president comes to power with new sets of priorities and employees, believing the formers have been totally wrong. Immediately after governmental change, they started telling people that the formers were bad and corrupted. Again a cycle is started from scratch. FM is one of those programmes which will be heading towards such a (sad) destination..." [L6.4,FD,family doctor].

The governmental change put aside many things from the past for political reasons:

"...in the very early days of the minister [of health], I asked him not to replace a couple of capable experts because of political reasons. I begged him not to exclude three out of five people who know FFCI, because of politics..." [N17,PR,national health expert].

Such illogical replacements were even cited by the current policy makers in office:

"...we have shamelessly put the 4th plan (for development) aside. It is dead in reality. I am sure, if the current government (conservative) is replaced by reformists, there would be no change! I think our politicians do not make decisions for long-run macro benefits of the country...we spend our resources for accusing each other because of political directions and fulfilling personal benefits..."
[N5,PU,senior insurance policy maker].

Second, changing the majority of managers and policy-makers by the new government blunted the recently started implementation:

"Although current officials were theoretically willing to implement this reform, it stopped for a while. Chancellors of universities, managers and policy makers who had been trained many years for that were replaced over a night..."
[N4,PR,national team for reform].

Worse still, trained managers were replaced with incapable people, which resulted in raising the resistance to change and stopped the implementation on occasion:

“...changes which were due to political reasons blunted the implementation. FM opponents of FM took the office in some universities, which flared up resistances to the reform. It took at least 6-7 months to get back to the starting point. Appointing incapable managers imposed serious doubts about the entire reform and irreversibly damaged implementation...” [N10,PR,national team for report].

There were serious concerns about the capability of new personnel:

“...both Dr. X and Dr. Y [the former and current ministers of health] are passionate and committed to the reform, but Dr. X's performance was better. He appointed alert managers who were familiar with the country. His deputies, particularly the person in charge of the reform was the chancellor of a big university beforehand with decades of experience in FM. I pay respect to newcomers, but they severely suffer from lack of such knowledge and insight. It will take years for them to understand what is going on. I doubt we go significantly further...newcomers themselves are not guilty. If they had grown up in the (health) system, they might perform better...” [N9,O,senior national policy maker].

This quotation illustrates the capability of new managers, judged by a neutral third party. As a high level and experienced trustee, he belonged to the party of the new government. His insight about the structure of the MOH suggested that his concerns were well-informed.

Worse still, the position of the MWSS, the ministry which was established in 2002 mainly to facilitate reforms such as FM was unsustainable. In 2006, in the period that crucial decisions were being made, some MPs were debating the dissolution of the new ministry:

“...the recently established MWSS was subject of continuous changes and threats, which prohibited us to reach a concrete policy. It is necessary that the MWSS is granted the authority to defend its position against parliament...” [N15,PU,senior insurance manager].

Unsustainability of the MWSS arose because of the appointment of a minister who was biased towards FM. The former MP and the Head of Commission for Social Affairs viewed FM as a courtesy of parliament to serve the poor:

“...in fact, the parliament did a favour for villagers by diverting money to Behbar. The MOH is not allowed to tell us how we should spend this money...” [Interview with local newspaper,22.04.2007].

The MIO also underwent substantial managerial change with incompetent newcomers, even at lower levels:

"... political change was an earthquake with massive changes at even subordinate levels... The majority of trained managers were substituted by people who were blind in many aspects. e.g. Dr. X [former head of national office for health sector reform] was replaced by the one you know!. Dr. X has become familiar with A to Z of FM within last 5 years..." [N8,O,senior finance official].

At the early stages, the former minister was side-lined along with many premiers, whose expertise and experience had contributed to the design and development of the reform. They were not even invited for part-time consultation. Even experts in the MOH whose expertise and knowledge were unique in some respects were not consulted:

"How many guys like Dr. C [an experienced consultant in the MOH] in this country know the PHC and the requirement of FM? Why they were side-lined?" [L5.1,DA,district health manager].

Appointing personnel who were not fit for their job diverted the implementation from its right direction:

"...the most important facilitator that we lost was our human resources in whom we had invested a lot and side-lined them once we started to implement..." [N5,PU,senior insurance policy maker].

Such an exemplification by a senior policymaker, who was still in office, explicitly portrayed the extent to which the implementation was harmed by the changes in management. The newly appointed officers were accused of lack of understanding and vision:

"I sit on Dr. X's place who was a strong policymaker and strategist. Willing or not, I am compelled to repeat his words, even I do not know much..." [N10,PU,PR,national team for report].

Some mentioned that the extent to which implementation was adversely affected by unsuitable managerial changes was significant enough to endanger the future of the concept of FM:

"Given the situation, such changes [managerial] will have no result but failure. Once a policy is defeated in this country, it would be extremely difficult to revitalize it...if it gets rejected in parliament, many years must be passed for reconsideration. ... If FM is implemented as weakly as this, its natural essence is gradually faded, which leads to its termination. If so, any time you want to raise FM, you are accused of moving a corpse...." [N7,O,senior insurance policy maker].

3.3 Lack of decentralization

Provincial managers had some freedom to make decisions:

"...many issues had not been mentioned in the policy, for which we decided ourselves..." [P2,PR,provincial manager].

The provincial MIOs were also more decentralized than the DOH. They could make many decisions without the centre's approval:

"We just defined some general issues and gave full power of attorney to our provincial managers, as the representatives of the minister of welfare in the province. We undertook decentralization in performance, due to which the private sector was prioritized to deliver services in some provinces..." [N16,PU,former senior insurance director].

Compared to other provinces, the DOH in Golestan provided more authorization to district authorities to decide about operational matters:

"... Our (health) district authorities have full power to purchase their needed drugs. Massive drug warehouses in the centre of province have moved to small district places..." [P1,PR,provincial health manager].

However, the lack of decentralization blunted implementation. The diversity of authority delegated to district managers was seen as inappropriate:

"District authorities highly depend on the centre. In fact, we have not managed them towards appropriate decentralization and they do not know their authority. Therefore, some managers do whatever they want, because of their bravery and personal experience, whereas others make no difference because of their low-profile personality..." [N5,PU,senior insurance policy maker].

Lack of authority caused regional managers to bypass the centre and make decisions on their own to move the implementation forward. Implementation therefore was patchy across the country, depending on how far the province was in decentralization:

"Up to now [month nine of the year], no agreement has been signed at high levels. Within the last couple of months, I have visited many other provinces, many of whom act provincially and do not wait for the national level [to make decisions]. Either in the MIOs or the DOHs across provinces, colleagues are far ahead of the centre. This cooperation is correlated to how close the heads of MIO and DOH are in the province. Provinces show significant differences in this regard ..." [P4,provincial health manager].

The MIO had a better performance in decentralization of its local branches. The MOH was also moving towards decentralization. However, its success relied highly on individuals, either university officials or junior managers in the health districts. In Golestan, implementation was patchy across the eleven health districts.

3.4 Rushed implementation

Despite plans to pilot the policy in four selected provinces, the rushed universal implementation of FM was started in the transitional period during the change of governments. The political decisions pushed Behbar to be piloted nationwide, despite the lack of preparation:

"The implementation was done slightly precipitately, although the infrastructure was not prepared. We must have piloted it in some provinces beforehand, however, it was a good flick overall. Even flawed, it was better that we did it. If we had waited to do it perfectly, there was no guarantee to ever start implementation..."
[P3,GMU,senior provincial health manager].

The political decision to start the implementation in a rush, due to which the pilot studies were aborted, was identified as the main reason for many shortages including lack of training and logistics:

"...we entered a national programme without piloting at the local levels...we started a huge and costly programme recklessly... we could use the pilot studies to define criteria for audit and to understand the public requests... team members could be also trained about fieldwork..." [N5,PU,senior insurance policy maker].

Key managers stated that because of the rush, they were not able to prepare well:

"...we insisted on implementing this reform. The government was being replaced and we knew if we did not fix it, it will not be implemented at all... our emphasis was recruitment of personnel as soon as possible... we had no time to work on many aspects..." [N1,PR,former senior health official].

Frequent changes to the policy and the harm it caused (Chapter 6) could have been avoided by conducting the pilot implementation:

"If I was leading the reform, I would have run a pilot before the entire implementation to avoid so many versions [of policy act]" [L2.3,FD,family doctor].

Nevertheless, the rushed implementation was branded as inevitable to ensure FM went ahead:

"...the government was changing. We were worried if we did not begin to implement, it was implemented at all...if we had not settled doctors in villages, parliament would not have approved the budget for coming years..." [N1,PR,former senior health official].

Starting implementation in the last days of the former government was strongly defended. The rushed implementation was described as necessary to secure the position of the entire reform:

"... by law, if a budget is not spent in due time, it is returned to the pooling system, which prohibits allocating it for the coming year...if we had waited more, the parliament did not approve the requested money for the next year. Whereas, by settling doctors in villages, MPs understood that we are serious in implementing the reform..." [N14,PR,former senior health official].

4 Communication

Interviewees raised three aspects of communication which affected implementation: feedback and dealing with it; communication among individuals; and the mass media.

4.1 Lack of feedback from the periphery

There was no structured mechanism for the centre to receive feedback from the periphery:

"...we randomly get letters from different practitioners who complain about implementation. There is not a system to take feedbacks either from practitioners or the public...our attempts to establish an office to handle this has not succeeded..." [N2,PR,senior health official].

The MIO and the DOH in Golestan considered some mechanisms in place to keep in touch with the periphery:

"...in the first six months [of implementation] we did not have an effective method to take opinions from periphery. We gradually established a committee, attended by heads of district health authorities [eleven of those in Golestan], head of the district MIO and representative of the head of the provincial MIO. They monitor implementation and provide me with direct feedback..." [P2,PU,provincial manager].

The GDOH had also prepared a problem list on the basis of practitioners' surveys:

“... we sent a questionnaire to all peripheral people in sealed envelopes, asking about practitioners’ difficulties and shortages... despite my expectation to mostly receive personal problems, a long problem list of mainly process challenges was prepared...” [P1,PR,provincial health manager].

Results of such surveys and audits were accordingly dealt with to improve implementation, either by the MIO and/or the DOH, and passed to higher levels:

“We categorized the problem lists for different groups of recipients. Some issues were in the authority of national managers. A few problems could be sorted out at the provincial level and Board of the university... some concerns might be easily dealt with through a wider approach to the policy. We authorized district managers to be less conservative and go ahead [to solve those]...” [P4,provincial health manager].

The MIO in Golestan more or less followed the same process to deal with feedback:

“We have a monitoring office in the MIO which immediately reacts [to feedbacks] by commissioning a delegate to the field. Feedback sometimes has resulted in changes, but there are some issues which are beyond our authority and we ask for information on them...our system has got the ISO standards. Our corrective actions are both preventive and improving ...” [P2,PU,provincial manager].

Other stakeholders such as the GPA had prepared problem lists on the basis of doctors’ letters and correspondence from the entire country:

“... our colleagues [GPs] have been criticizing the implementation for its structure, contracts and content. We have categorized and reflected those to relevant bodies for proper action...” [N6,O,national union manager].

Public representatives held informal sessions with people to make the public aware of the reform. However, they were disappointed because of the lack of response to such feedback:

“...we conveyed the results of our several meetings with public to the officials. They were pleased to hear our arguments, however, nothing changed...” [L1.7,villager].

In early 2007, the national PEHP set up a biweekly forum, attended by the representatives of selected universities (four or five universities in each session) including the chancellor, the deputy for health, the head of PEHP and other managers. Day long meetings were held at the office of the DOH in Tehran, by invitation and in the presence of the DOH, as well as other national senior managers and experts. I attended one of the meetings in late

December 2007, which took nine hours, within which every single university presented its performance in implementation, while it was being criticized and ranked by central experts. Universities which could not assure the judges of proper performance failed the session. They were granted a certain time period to compensate their shortages and address the forum about their improvements. The overall feeling was that such forums provided constructive feedback, as well as an opportunity to learn from each other. The MIO did not attend the forum. I could not detect any study, survey, or forum, even in Golestan, within which the public or their delegates kept officials posted about their feedback.

4.2 Communication among individuals

The low amount of information was not appropriate for creating suitable ways of communication among individuals. Practitioners were not kept informed:

"...we try our best to keep practitioners in the loop by transferring them (orally) the tiny amount of information that we get..." [P4, provincial health manager].

Ironically, practitioners were reprimanded of not keeping the authorities informed, even on the administrative correspondence from the centre:

"... I did not expect to see my correspondence, in which I had requested equipment, in the bin. I was shocked when I saw bunches of letters abandoned in the file... sometimes auditors grill us because of unawareness, while the [health centre] manager does not keep us informed..." [L4.6, nurse].

Flow of information was so slow that even some alert practitioners were unaware of what FM was supposed to provide. They mixed up the duties of other protocols [which were being piloted in their centres] with FM, simply due to lack of explanation from central and regional levels:

"...FM has not changed our responsibilities, but because of being the pilot [she meant other protocols than FM which was accidentally introduced to the system with FM], the sensitivity has been increased..." [L1.4, midwife].

There was no defined communication other than unofficial and incidental links between the managers and practitioners and among practitioners themselves. Therefore, they could not share their experience and systematically assist each other in implementation:

"...sometimes we contact our neighbouring provinces. They also occasionally ask us about payment mechanisms... there are only five provinces in the national committee..." [P1,PR,provincial health manager].

The MIO was more organized in creating the opportunity for communication and interaction, at least at the senior level:

"We have regular seasonal meetings between senior managers from around the country, which are rotationally hosted by provinces. Those sessions are a good chance to share information and visit health centres in the host province, which has been very constructive in making us aware of implementation ..." [P2,PU,provincial manager].

4.3 The mass media

There was a consensus that the mass media, particularly the Iranian national TV (IRIB), had not been efficiently used to promote the reform. In fact, the main media were never a member of the coalition, despite its effective previous roles in promoting health:

"The media has done little for this reform, despite the IRIB's extraordinary role. Its influence was amazing in my era and I am indebted to the media for most of my success. The core of any health sector reform is bringing people in line with health, without which we reach nowhere. I was successful (in implementing the PHC) because it (the IRIB) was my microphone...The system does not vaccinate people; rather the public's insight vaccinates them. They actually demand services, rather than being forced to accept change..." [N9,O,senior health policy maker].

Some described the media as destructive and subject to political exploitation:

"The mass media has done nothing (in the reform). We do not have good media in this country. All media are publicly owned, conservative to criticize wrong issues... in fact, the media in Iran is used to push crow-bar of the MWSS on the MOH and vice versa. None of us has used it in favour of implementing the reform... to introduce FM to the public, I have even asked the MOH to produce video clips such as the ones for improving the energy consumption or safe driving, but no reaction..." [N5,PU,senior insurance policy maker].

Video clips to promote good driving which were broadcasted on the IRIB on the order of the police were seen as an efficient means of training. Lack of media engagement harmed the implementation because mostly negative views towards the policy were broadcasted:

"...because we did not engage with them, the media has acted more as a barrier by broadcasting the opposite views more than the positive ones..." [N8,O,senior financial officer].

Some examples of such negative effects were mentioned:

“... I watched an interview on TV in which a famous heart surgeon was incidentally asked to talk about FM. He illogically criticized the policy with no reason and in absence of anyone to debate with him. Even if unintentional, such events destroy FM in the society...” [N10,PU,PR,senior member of national team for reform].

Even on the few occasions that FM was covered on the IRIB, it was assessed as inappropriate and worried the public:

“...talking to people has its own language. A brief talk about insurance on a TV episode has no benefit than making people worried about their uninsured children. People are attracted by talking about things which are their cup of tea, such as their health situation or how losing weight, etc...” [N7,O,senior insurance official].

Print media were also consistently criticized of not contributing toward implementation. I could not find any particular article in magazines or newspapers about FM, except a few critiques in the IMA seasonal journal which addressed the lack of implementers' knowledge and the rushed implementation. The journal was exclusively distributed among doctors. Calling FDs as “doctor of the village”, it made doctors angry as they felt that the IMA looked down at family doctors.

Many officials felt that implementers had failed to approach the media to promote the reform:

“...We are guilty of not establishing a proper relationship with the media, thus they are unconsciously endangering implementation... we are certain if we correctly address them, they would defend the policy because they would presumably understand that if their children want to live in this country, there is no other way [than rationing services]...” [N4,PR,senior member of national team for reform].

The mass media approached the reform in a negative way, so it could not prepare people for implementation:

“...because the media was not aware of the policy, it could not play a positive role. I think the media reflected more on critiques. Traditionally, we Iranians highlight defects rather than successes... (he made an example of how a movie promoted position of a relief organization in the society)... I think if FM had been explained [by the media] to the public, we had a less stressful job... they have seen mainly the empty half of the glass, either the IRIB or newspapers...” [N15,PU,senior insurance manager].

In addition, policy makers and implementers got frustrated by witnessing that only failures were reflected on the media:

"...although the media has not been a barrier, it forced us to respond many criticisms that made us exhausted. Sometimes it led to our unwise decisions, inappropriate reaction, or resignation due to increasing pressure..." [N11,PR,senior health official].

Worse still, policymakers were cautious in interacting with the media, for fear of losing their position to political rivals:

"...our presence on the media has not been appropriate. The huge managerial replacements made us conservative to do so..." [N16,PU,former insurance manager].

Some interviewees pointed out that even a slight presence of FM on media was mostly commercial, not for educating the public:

"...even the rare occasions of FM appearance on the IRIB have been the advertisement impulse and show off to promote some policymakers, rather than attempts to increase public's awareness... if it is going to be training, it should be continuous, starting from and ending in a certain point... I suppose if FM is going to be established throughout the society, the public must be continuously trained by the media, similar to what we did for the PHC ..." [N17,PR,senior health expert].

Furthermore, the media was accused of being dominated by specialists, who endangered rationing and FM:

"... I am a higher specialist myself. Instead of promoting FM, the IRIB has been promoting the specialties and higher specialties. The IRIB's approach to health is precisely against ours..." [N2,PR,senior health official].

In a society with no private TV or radio, the IRIB was accused of looking at health through monetary lenses:

"...the IRIB is an organization which asks for money prior to any discussion. It does not recognize health as a national task and for all organizations. Why does the IRIB invite a doctor to talk about acne? Is our problem informing people about acne, or should the public be aware of the challenges of public health and how those challenges are going to be tackled? ..." [N14,PR,senior former health official].

Health officials accused the IRIB of prioritizing commercial interests over training the public, but they allocated a very small proportion of the FM budget for the media.

Nonetheless, the provincial IRIB in Golestan was employed more effectively to promote the policy:

"...We have created a good interaction with the IRIB. There is a weekly TV programme, which is commonly produced by the DOH. There is another one called Garden alley, which is hosted by one of our managers. The IRIB has provided us many opportunities free of charge. It even heats us up here [in Golestan]. We have regular panels being attended by the DOH, the MIO representatives, the chancellor of the university, etc...I think we overcame many primary challenges because of the strong provincial media..." [P1,PR,provincial health manager].

Surprisingly, such a structured approach to the reform by the provincial IRIB was not acknowledged in villages, while the IRIB's failure was addressed by few practitioners and members of the public:

"... training on TV could be so helpful, but I have seen nothing about it..."
[L1.4,midwife].

Mentioning the effectiveness of TV programmes to address people about the reform, the public trustees complained about a lack of a TV series about FM:

"... the first prerequisite to enjoy this chance (FM) was getting trained by the IRIB... people like movies, short interludes or cartoons like X more than anything..."
[L2.9,imam].

Apparently, despite the provincial health officials' expectations, the impact of TV series [assuming such programmes existed] was negative, at least on practitioners' motivation, which indicated the need for change or revision:

"... A programme called 'window' flies on the antenna across the province every Friday that covers FM sometimes. Not only is the programme not informative, but it actually attempts to confront the implementers...They never encourage patients to ask for less prescription drugs or listen to their doctor, rather they attempt to diminish FM. They have been mostly destructive towards the reform..."
[L2.3,FD,family doctor].

However, despite provincial managers' emphasis, there was a consensus at local level about the half-hearted engagement of the media in the implementation.

5 Explanation of the reform to staff & the public

Some key individuals were trained to design and implement the reform:

“...most policy-makers were unaware of modern health notions and managerial concepts. Within the last 5 years, to build up our people’s capacity, we asked the WHO, the University of Harvard and other scientific bodies to hold courses such as Flagship and workshops in health economics. Attending such trainings, they realized the need for the reform and attempted to make evidence-based policies to undertake it...” [N14,PR,former senior policy maker].

However, the lack of training for both practitioners and the public was cited by every single interviewee. Managers across the MOH and the MIO were also not trained in the necessities of the reform:

“...our main mid and long-term challenge is lack of explanation (of the policy), whether to the public, or practitioners and managers. There are thousands of personnel and senior managers across the MOH, universities, and the MIO, to whom preliminary concepts of referral system and necessities of FM has not even been explained ...” [N10,PR,PU,senior member of national team for reform].

As this senior policy maker declared, managers did not even have a basic introduction to FM and its advantages. Those who were supposed to promote the policy suffered a lack of awareness. The opportunity for training prior to implementation was missed, or such a chance did not occur at all because of the rush to implementation:

“...our crucial problem was that the custodians of the implementation had not been explained... if only I could train the involved people prior to the implementation even by postponing the implementation for 2-3 months. Training people before starting was more important than settling blind practitioners in villages ...” [N12,PR,senior health official].

This key policy-maker was regretful of irreversibly missing opportunities to explain the reform in advance. Lack of awareness about the policy adversely affected its implementation. Because the public was not appropriately prepared for the reform through poor advocacy and training, their reaction to the policy was affected. In addition, even information focus courses which were held for policy makers and national managers, were not documented and disseminated to staff.

5.1 Explanation of FM to practitioners

Practitioners, particularly doctors, were not only unaware of FM, but were not trained to be a family doctor. Adverse impacts of both mostly effected doctors, probably because of their distinct position as the head of the health team with the gate-keeping role.

5.1.1 Awareness of the policy

Implementers were accused of inadequate interaction with practitioners to bring them in line with the policy, its expectations and necessities:

"Although it is late, but explaining the policy to the practitioners is the first task that the MOH must carry out, particularly for doctors, without which we will get lost. I never think that sending some legislation drafts and letters establishes the policy in their mind as it is in ours..." [N8,O,senior finance policy maker].

Managers were irritated because doctors were not aware of the policy expectations:

"...a big problem is that our practitioners do not match the requirements of the reform. A number of doctors were practicing in their own clinics prior to joining the implementation, having no idea of what the policy expects..." [P1,PR,provincial health official].

Lack of practitioners' awareness lowered their satisfaction, because of the lack of insight about the aims and necessities of the reform. It was significant enough to be the chief complaint of one purchaser:

"...if only we had made practitioners more aware of the policy or if at least we had done so after implementation, we would be able to show them (brilliant) future horizons of FM, which could certainly affect their attitude..." [P2,PU,provincial official].

Practitioners themselves asked for clear information and being kept informed of FM:

"...we were not informed of this (FM). The district health manager who is not even familiar with the alphabet of health made us aware of the general issues in the health system (not FM), very briefly and vaguely... actually we trained ourselves. No educational material was provided than a folder containing what we were expected to do..." [L6.2,FD,family doctor].

The lack of the policy explanation made practitioners suspicious of the implementers' capability to undertake the reform:

"...they could not even tell me what they expected me to do. I think they do not know themselves what they want... some irregular workshops were held, but were irrelevant to FM. We were not even given a handout..." [L4.4,nurse].

There was not a planned curriculum for training them, at least to transfer basic requirements for practice and expectations. They were promised training sessions, but nothing materialized. Practitioners doubted the effectiveness of such classes which were not designed to improve the participants' knowledge about FM, because of the lecturers' ignorance. Thus, they concluded those ceremonial sessions were held just to be held:

"...as teachers, we were blank ourselves. We were told that the participants are private doctors, who have been practicing in their own clinics and are now in charge of FM. We were instructed to explain our duties to them. We taught them nothing of FM, but whatever we had been doing as managers..." [L5.1,DA,district health official].

Even if flawed and inappropriate, such sessions were held only once at the beginning of the implementation. Given the high turnover of doctors, many of whom did not participate in such sessions and the majority of them denied the existence of such sessions.

5.1.2 Training to be family doctor

Recruited family doctors were GPs whose medical training did not appropriately match with FM. For instance, health promotion was not taught to doctors:

"...implementing FM requires radical changes in our education system. FM might not be properly established, unless the training system shifts from patient dominant to health dominant. Doctors, who most think of running their private clinics, might not keep the population healthy over a night..." [N2,PR,senior health official].

Doctors were not only unfamiliar with the health promotion aspects of their responsibilities, but also looked down on it as not their top priority. As a result, graduating GPs from the Iranian universities did not possess essential expertise to function as family doctors:

"...the most important change in medical education is to change the medical mentors' approach to health. To understand that beyond working in hospitals, doctors are responsible for societal health... this is why, we are seriously following to teach our medical students 'outpatient case management which emphasizes on prevention and health promotion ...' [N12,PR,senior health official].

Lack of public relations skills to communicate with the public adversely affected the public's trust:

"...our health teams, particularly the doctors, do not have enough expertise to interact with the public. Many are young, recently graduated and inexperienced

doctors... whereas we believe that a family doctor must be 5 stars...
[P3,GMU,senior provincial health official].

In addition, primary care has not been effectively embedded into the curriculum of medical schools in Iran:

"...recently graduated GPs have not been efficiently trained on health dimensions of the society and public health specifications including primary care..."
[N9,O,senior national policy maker].

Worse still, doctors had little insight into the rural health fields:

"The gap between what we were taught and what is really seen in the field is horrible. I do not exactly know which one must be revised, academy or the field. Even our environmental health experts are not capable enough for fieldwork...to succeed we must adjust our educational system to bring FM in line with field requirements..." [P4,provincial health manager].

This was why proper training about FM was the first item on many interviewees' agenda to revitalize the cascade of implementation:

"If only I was able to gather a bunch of GPs to train them at least six months about FM... There are some doctors who look at FM as just an opportunity to make money... I am even prepared to give scholarship to some GPs to be trained in the British NHS, where FM has been successfully implemented..." [P3,GMU,senior provincial health official].

5.2 Training the public

Interviewees also explained the effects of the lack of cultural preparation of the public, prior to and during the implementation. Such a lack of awareness annoyed practitioners, because of the public's resistance to the reform:

"...a number of measures must have been simultaneously taken prior to implementation, most importantly the public preparation... we asked, even begged people to register in Behbar. It should not have been like this. We must have created a need in the public to ask us about insurance and better services instead..." [N3,MP,member of parliament].

Behbar introduced almost free use of services, but practitioners were unhappy because of the lack of the public preparation:

“...sad to say, we are witnessing how implementing a reform without a-priori cultural preparation ends up in failure...” [N7,O,senior insurance policy maker].

Villagers compared themselves with their urban counterparts who were entitled to use their insurance log-books for whatever services, and therefore felt inferior:

“...lack of the villagers’ awareness of the extent to which FM is in their interest was our big ignorance...villagers feel contempt, assuming urban households enjoy better and more appropriate service which they are deprived of. They must be informed about this...” [N15,PU,senior insurance manager].

Moreover, the public’s lack of awareness about their rights broke the referral cycle and damaged the quality of services:

“...if patients knew that it is their right to get my feedback (specialist doctor) written down in their log-books, they would be pushing me to do so, to stop themselves from being passed between doctors. They would also know that the next time, they must be visited by their own doctor, who knows them well... the probability of mistakes would have dramatically come down...” [P5,O,provincial union official].

Public cooperation was also damaged because of the lack of explanation of the benefits they were entitled to in FM:

“...the first important recipe for success in any change is assuring the public that their interest is met by the reform. People must feel they will be benefited by implementing a reform, financially or whatever...” [P8,O,senior provincial officer].

Perhaps, this was why implementation was easier in more literate areas, where people better understood the reform:

“Public literacy has been a meaningful determinant in this implementation. The more literate the area, the better their compliance ...” [N11,PR,senior health manager].

Implementation was not publicly supported because of failing to educate the public, which lowered their cooperation. Instead, the public became a barrier to implementation in many villages. Changing public behaviour was difficult because they did not accept the terms and conditions of the reform:

“...people are still confused about their rights in this reform. They think because of the (insurance) log-books, they are entitled to visit whoever they wish. They do not

know that a referral system is in place, within which the doctor, as the health custodian, has the final say..." [P1,PR,provincial health manager].

In addition, doctors were irritated because of public behaviour due to unawareness:

"...to be honest, if I do not stamp their log-book they will hit me. We have to stamp sometimes just to get rid off some patients. Sometimes they bring the log-book (not the patient), asking for referral to the specialist. They insulted me couple of times ..." [L6.7,FD,family doctor].

The main aim of FM, promoting health by building a close relationship with the public, was threatened and personal relationships between doctors and the public were destroyed. Fights and arguments not only inhibited a mutual relationship, but prevented some people from visiting health centres. Doctors acknowledged the patients' innocence in this regard, addressing the lack of public preparation:

"...sometimes I have to horribly wake up at 2.00 am, because someone knocks the door asking for his log-book to be stamped for visiting a specialist for the day after...sometimes they wake me up around dawn time for a common cold...I do not think the public must be blamed, rather the government is guilty of providing them a dateless ticket with no a-priori explanation. Given the situation, what other behaviour do you expect?" L2.4,FD,family doctor].

Managers also addressed the fact that the public have not been informed to avoid such misconceptions:

"...if only we had brought people in line with the reform. They only understood rural insurance, not the referral. They assume this log-book is like others..." [L3.1,DA,district health expert].

Worse still, given the tribal culture of some villages, some of the non-local doctors who rejected patients' unreasonable requests were grilled by officials. This was why the public representatives asked for improved explanation:

"...I suggest endorsing a training plan in FM through which health volunteers could teach the public the requirements of the reform..." [L5.9,imam].

5 Auditing performance

Auditing practitioners' performance gave rise to three concerns which affected implementation: the appropriateness of the tools and methods; poor quality of audit staff; and how audit results were applied to improve implementation.

6.1 The appropriateness of tools & methods

The auditing system was criticized for several reasons including its inappropriateness as the basis for pay for performance; lack of defined criteria; and lack of audited individuals' awareness about the content of such criteria:

"...to create a competitive environment for implementing FM, the output of health centres must be evaluated on the basis of some generous and available criteria... ask Dr. X or Dr. Y [the head and vice president of the MIO] about the criteria they use in audits? They do not have any criteria to assess individuals' satisfaction. We have only included some quantitative criteria such as the number of issued log-books or registered population, not the qualitative indices which enhance the quality of services..." [N5,PU,senior insurance policy maker].

Lack of evidence-based, clear, and relevant criteria for audit, caused auditors to mix up level of audits and left the output vulnerable to individuals' interpretation:

"...a clear format for audit with the distinct and defined items is needed for accurate grading. For instance, the MOH audits the health houses, meanwhile the health houses are separately audited by the MIO, the district health authority, as well as the health centres. It shows that there is no logical grading in place for auditing. In addition, our audit is unsystematic, with no score or ranking. Everything depends on the auditors. I mark a centre as perfect, whereas it is marked intermediate by another auditor... it resembles the Rumi's story about touching an elephant in dark, everyone describes it as the touched part..." [P4,provincial health manager].

The ambiguous hierarchy of auditing ended up in a waste of resources. Indeed, there was no checklist or checklists were not useful in changing practitioners' behaviour:

"... audits must be on the basis of measurable criteria, not whatever the individuals fancy. An appropriate checklist is a useful tool to change behaviour... people would like to get good marks. If our aim is changing behaviour, then the checklists must be logical and proportionately weighted for the different items..." [P3,GMU,senior provincial health official].

Because there was not a defined checklist, doctors did not take the audit seriously:

"...in the last nine months, I have been audited once. The way they mark us is funny. They ask us about the list of our patients, and whether we tick the referral forms. They tick some things quickly... we do not actually know what we are going to be audited on (laughing)..." [L2.4,FD,family doctor].

Practitioners were not aware of the content of checklists and what they were expected to do:

“...when doctors settled [in health centres], we must have kept them informed about our expectations and what they would be audited about... an audit is different from an exam...” [N10,PU,PR,member of national team for reform].

Apart from the lack of piloting the audit criteria, the lack of explanation about the audit process caused serious fears of ignorance:

“We have fallen into the habit of moving against rules. The society is not prepared to accept auditing. Making laws in absence of compliance worsens the situation, because it breaches the immorality of breaking rules. Audit is good in principle, if the public had been culturally prepared in advance...” [N9,O,senior policy maker].

Concerns regarding the cultural inappropriateness of auditing were mainly because of embedded ceremonial behaviour in Iranians, which prohibits both the audited and the auditor to apply the results of audits:

“... auditing is an amazing concept, however, it does not work in our country because most of the time the ceremonial relationship discourages people to act properly...” [N8,O,senior finance official].

Nevertheless, the DOH in Golestan tried to bridge the gap by designing a checklist during workshops attended by representatives of the district health authorities and provincial managers:

“We have designed an audit pyramid that might be also used at the national level to mobilize the system...” [P1,PR,provincial health manager].

6.2 Poor quality of audit staff

After two and a half years of implementation, nothing had been done to train professional auditors. The lack of qualification and poor monitoring behaviour of auditors led to dissatisfaction on the part of practitioners, particularly doctors whose income was more linked to the audits than others. The audits did not only fail to improve practitioners' behaviour, but also led to scepticism about the reform:

“... I agree that audit is necessary and good, but unfortunately a person with a diploma or BSc audits me. His main concern is why I am paid more than him. He tries to deduct my score as much as possible to level his salary with me... to put my money in his pocket perhaps...” [L1.2,FD,family doctor].

Doctors requested to be audited by a doctor, accusing the non-medical auditors of not understanding them and being jealous of them:

"Do you know who decides how much we get paid? No doctor is among them. The auditors do not understand even two simple medical terms. Once we talk, they just shake their heads! I have no doubt they are depressed because they are not doctors. They knock our door at 1.00 am to check whether we are present or not... my sixth sense tells me what they have in their mind..." [L2.4,FD,family doctor].

Appointing non-medics to audit doctors was interpreted as an intentional act to diminish doctors, a sign of mismanagement:

"... Why should doctors not do this job [audit]? Once the DOH assumes that doctors are capable enough to improve the public's toilet behaviour and hygiene actions, why must not a doctor do this? Many doctors are unemployed and could do the job. I know they [auditors of the DOH] are not paid little, so payment should not be a problem to recruit doctors for auditing... if a high school student sees this behaviour with doctors, s/he doubts becoming a doctor, whose reputation is being endangered by people with far less education..." [L5.5,FD,family doctor].

Surprisingly, the senior provincial managers were well aware of the auditors' poor behaviour, but did not attempt to improve the situation:

"We have appointed some people with little expertise to audit the implementation. Auditing such a national and big reform needs well- educated people with good knowledge of technical and morality aspects of audit... because the results affect doctors' payment, that ends up in conflict ... " [P1,PR,provincial health manager].

Moreover, the audits were labelled as a charade, which would not result in improving quality of services:

"...many times in audits I notice that [health] centres have been made up, many secret letters have been distributed to change things, all leaves have been suspended and equipments have been installed quickly..." [N5,PU,senior insurance official].

In addition, practitioners complained about the conflict of interest of auditors, suspecting that the more they reduced a practitioners' score, the more money they could put in their own pocket (even though it was not true):

"... This is such a corrupted system that deducts (doctors' income) to expand auditors' pocket. It indicates that the DOH would like me to be a bad doctor...what sort of system is this with a direct link between deducting the doctors' money and crediting auditors' account. It resembles that a police takes money from guilty drivers for himself..." [L3.3,FD,family doctor].

Doctors did not trust the audit process or the level of their earnings which was based on it.

Given the low level of trust between the auditors and practitioners, some called for audits to be undertaken by others to avoid such accusations and to obtain an accurate base for payment:

"I think we must hand over the audits to private third parties. We could contract them to undertake audits and provide us with reports..." [N17,PR,national health expert].

Despite the agreement for common audits by the DOH and the MIO, they undertook parallel audits, using different criteria and checklists:

"... we had agreed to establish common audit teams along with the MOH, but the massive managerial changes deteriorated things..." [N15,PU,senior insurance manager].

Common teams for audit were more ceremonial for the MIO:

"We audit the health centres every three months. It was being independently done in the beginning. We established common teams to audit in parallel with the DOH. However, we have our own checklists and undertake our own audit..." [P2,PU,provincial policy maker].

No common audit was carried out in practice, probably because of different approaches to the implementation by the MOH and the MIO. The MOH was concerned about the quality of services, whereas the MIO's preference was quantitative aspects of implementation for payment. Nevertheless, the DOH and the MIO in Golestan held a few meetings to share results of their own audits.

6.3 Applying audit results

Interviewees had several concerns about the way that audit results were employed to improve implementation of FM. Many complained of not applying the audit results to train the practitioners for better performance:

"...audit results must be applied for training practitioners rather than a tool for punishment. Ones with low marks could be forced to sit a course, instead of deducting their income..." [P5,PU,provincial union].

Practitioners' felt that audits were similar to sitting an exam or being in an interrogation session, rather than an interactive process for improvement:

“... trying to show a serious gesture, auditors tick something quickly, ask foolish questions assuming we are in pupils in elementary schools. Worse still, they do not know themselves neither the question nor the answer... it looks like grilling or being in custody rather than a constructive audit session...” [L6.6, Midwife].

Using audit results to calculate the salary of practitioners was identified as harmful:

“... Applying audit results in doctors’ earnings is conceptually good, but it must not harm doctors. They are not allowed to freeze doctors’ money until the audit results get prepared... they could apply it for scientific promotions instead...” [N6, O, national union, physician].

In addition, many practitioners believed that the results were applied discriminatively:

“I have received many complaints from family doctors about discriminations in audits. Comparing their income with each other, they think individuals’ opinions determine their payment instead of their real marks. Across the districts, doctors believe that despite their similar scores, their income was significantly different, accusing managers of manipulating the results discriminatively. They lost their motivation for better and harder work ...” [P4, provincial health manager].

All in all, because of the manner of undertaking audits, expertise and morality of auditors, and the wrong way of applying the results in the payment, a number of interviewees were very critical of the audit system:

“The current audit system is not reliable... it must be extensively revised. Unfortunately, it does not enhance the quality [of services] at all. We often audit to grill people, not to train them. The effects of such behaviours have been adverse at many places...” [P7, PR, provincial health expert].

7 Summary

This chapter has focused on the interaction between the policy and the environment in which implementation took place. Therefore, factors that were discussed in this chapter were consequences of issues in chapters 6 & 7. Five major issues arose that affected implementation:

- Lack of local understanding resulted in wrong decisions;
- Unrealistic policy making in an autocratic background ended in merger of two diverse policies;
- Unrealistic and ambiguous policy resulted in inter-organizational hostility;

- Lack of clear governance of health and health not being priority led to meritocracy undermined; and
- Caused lack of attention to human resources.

First, as mentioned in Chapter six, the policy was formulated with no consultation with local informants, so the imposed policy was not tailored to respond to various peripheral requirements and was mistakenly executed. That was why even incentives for encouraging public resulted in their anger and dissatisfaction. For instance, the public registration for Behbar that might have been an enjoyable experience turned in a bitter conflict between the public and volunteers who carried out the job. The decision was reducing the registration fee on frequent occasions, apparently a good attempt to encourage as many people to register and get the Behbar log-book. However, the decision was not developed based on an organic and mutual communication with the local level. This led to the public and practitioners' lack of faith in the policy and implementers and ended in failure.

Another consequence of autocratic decisions that attributed to implementation failure was payment to practitioners, which was hugely welcomed in concept, but it was practically a painful and dissatisfactory experiment because of what was called ineffective bureaucracy. In fact, even positive aspects of the policy wrestled the autocratic nature of the society and were faced preventable barriers. Payment to practitioners was too delayed to overcome practitioners' dilemma to stay in deprived places, so their turnover was high, in contrary to the necessity of implementation and long-term needed relationship between patients and practitioners.

Second, the study revealed that implementation was a failed attempt to merge two diverse policies (FM & Behbar) by two organizations with diverse and sometimes contradictory goals. It was a mission which was failed to accomplish because of a chronic barrier before the development of Iran: not making goals clear before starting to implement policies. This was not the case only for FM. This chapter presented a few examples of people who boarded the policy ship with different or even conflicting agenda, hoping to achieve their personal or organizational benefits. The public benefits and efficient engineering of resources were not considered. The two main implementers: the MOH and the MIO pursued contradictory goals. The former's aim was to promote health, whereas the latter aimed at bridging the gap in service provision and accessibility for the poor in rural areas through Behbar. They agreed in the beginning to do this as a common task, accepted

parliamentary bill and started to implementation. However, individuals at a local level were able to change or override the constitutional rules and divert the direction of implementation to obtain their organizational diverse aims, which resulted in several failures. What was implemented was neither FM nor fulfilled the MIO's goal. Therefore, the resources were wasted and FM lost its reputation for the public.

Third, the study revealed the severe hostility between the MOH and the MIO as the main barrier to their satisfactory cooperation in the common task of implementing FM. The hostility was not only due to their diverse goals. For two reasons, whatever policy was putting into practice by these two bodies might have experienced more or less a similar destination. First, their organizational perspectives were fundamentally different that was even recognizable for several staff at the local level. The MOH was branded a preventive focused organization whose attempt was promoting health and improving primary care. Whereas, many described the MIO as a curative focused body who by default was reluctant to pay for primary care. Such an accusation was ruled out by the MIO after they started implementing FM with the MOH, although it was proved with several evidence in practice. Second, their organizational past bubbled up their tension because of their effort to prove their supremacy. The MOH was unhappy at losing control over the MIO. On the other hand, the MIO's focus was proving its independency to the MOH. They looked to each other as rivals not partners. The MOH accused the MIO of not releasing money so paralyzing the MOH to fulfil its goals. Whereas, the MIO restricted payments to the MOH, accusing it to not meet the relevant criteria of implementation. This was why their cooperation in the purchaser-provider split failed. The concept of purchaser-provider separation and the benefits it might bring into the health system was attractive to many interviewees. However, the separation resembled a political game for organizational benefits, which reduced their cooperation considerably, diminished their trust in each other and collapsed their volatile partnership. Time and resources of the two were wasted fighting and accusing each other, rather than attempting to improve implementation.

As a harmful consequence of little willingness for cooperation, interviewees at all levels pointed to communication failures that avoided a proper command centre for implementation of FM, which in turn obscured it in several ways. For example, because of the inevitably rushed implementation, no systematic mechanism was established to get feedback either from practitioners or the public. This resulted in a lack of interaction and little trust between them, which inhibited the flow of information for improving implementation. It also led to a flawed process of auditing practitioners' performance either

in conducting audits or applying the results, which not only resulted in not improving practitioners' performance and behaviour, but reduced their trust in the health system.

Fourth, scientific tasks were approached ideologically, so meritocracy was undermined. Political support was beneficial for Behbar to get parliamentary approval, because of being consistent with the pillars of the revolution. However, healthcare was not a national commitment so the majority of policy makers and managers were replaced when the government changed, due to political preferences. Given the limited availability of technocrats trained for the reform, replacing them in the early stages of implementation with cadres who lacked knowledge, insight and expertise, harmed the implementation and faded the FM policy for the public.

And lastly, human resources were not considered as pillars for development and core to the policy cycle. Due to autocratic nature of policy making, some important stakeholders were ignored in defining the policy, the consequences of which were discussed in Chapter 6. In addition, there was too much attention to hardware, whereas little attention to human resources as the software for running activities. For instance, the preparation phase was limited to physical spaces and equipping health centres, albeit it was not satisfactory at the end. However, little attempt was conducted to prepare people at the three levels for the reform. Explanation of the reform is a good example. At national level, policy makers other than a few were not explained about the reform, its necessities, prerequisites and changes it might cause. At the local level, doctors were not provided with a basic training regarding their duties and expectations. Given the general lack of training social medicine, public relations and primary care for medical students, managers and practitioners became frustrated and lost their trust in the reform due to lack of preparedness. This also decreased their motivation, which in turn reduced the quality of services for the public. Finally, the policy was not explained to the public either a-priori or after starting implementation. They annoyed and irritated practitioners by their inappropriate demands therefore. Worse still, the public were not aware of their rights such as keeping medical records, which decreased the efficiency of implementation. An important indicator of undermining human resources was not employing the mass media to promote the policy and make people aware of the reform, which consistently was emphasized by interviewees as a strong barrier to implementation.

Chapter 9: Impact of the policy on local stakeholders

Introduction

The experience of implementation and the content of the policy had impacts on local practitioners and public representatives. How FM was implemented affected their attitudes and behaviour towards the policy. In this chapter, the impact of the policy on three local groups: public sector practitioners (including members of health team in rural health centres: family doctor, nurse, midwife, and various technicians and experts who work under family doctor's supervision in FM), local private doctors, and public representatives is considered.

1 Impact on public sector practitioners (members of health team)

The FM policy had an impact on local practitioners in rural health centres including: family doctors, nurses, midwives, and other members of the health team. Most practitioners reported that implementation was different from their expectation:

"My preliminary interpretation from FM was something good for the public, which might also change doctors' situation... I expected delivering more services to the public through a real referral cycle. Such a dream was not only fulfilled, but also the implementation put doctors' reputation in danger. People ask us to prescribe some particular drugs for them. Others only ask to be referred, assuming we are a signature machine..." [L2.3,FD,family doctor].

Implementation created various tensions between the professions:

"...my expectation from FM was enjoying a personal and close family doctor. A doctor who serves families and responds to their A-Z needs..." [L2.5,midwife].

Non-medical practitioners were unhappy about the income gap with doctors:

"...GPs earn at least 1millionTM every month. What makes them entitled for this [high] earning? It is said that the government might not afford this huge money anymore. I think it will end up in budget deficit. Sooner or later they will terminate it because it does not fulfil public's expectations and is very costly ..." [L4.5,E,local health technician].

Substantial rise in doctors' earning was criticised by a few non-medical practitioners:

“... who says that doctors are the most important people to provide care? Could you even imagine a doctor functioning without a nurse in this village? What could s/he do if a pregnant women pops in the [health] centre with an emergency complain? Nothing... if managing the [health] centres is his responsibility, I could do the job much better... to be honest, they [doctors] are scared themselves of managing the centre...” [L6.3,N,nurse].

Members of health team both doctors and others were concerned about eight aspects:

- Lack of motivation;
- Lack of job security;
- Lack of respect;
- Delay in payment;
- Poor working condition;
- Poor contracts;
- Ethnic tensions;
- Rationing.

1.1 Lack of motivation

Provincial managers pointed out that the lack of proper incentives for better performance lowered practitioners' sense of ownership:

“... our service providers do not feel this programme as their own. I guess because there is no distinguished award for better performance...” [P4,provincial health manager].

Doctors complained about lots of responsibilities but lack of incentives, which decreased their willingness to remain in FM:

“In a very short period of starting implementation, I got happy because of the increased income. However, it does not fulfil my expectations anymore. I neither want this income nor huge work load, while I am being insulted. You remember how we used to be reputable. Even Bangladeshi doctors (some South Asian doctors worked in rural areas between 1982- 1990) were respectful. As the children of this country, we are deprived of minimum facilities as well as reputation. We are always asked for more work and work... I think it [FM] is good for passing the mandatory scheme, but not for the stable life... going this way, I do not think it would have a future...” [L5.3,FD,family doctor].

Doctors joined FM in the hope of delivering good services to the public, as well as better and more secure earnings. They criticized the implementation and doubted its

sustainability. Given the key role of the doctor as head of the health teams, such an attitude harmed implementation. Many doctors did not consider their role a sustainable position to establish a long-term relationship with the public. Instead, they viewed FM simply as an opportunity for a higher income and a route to a brighter future: becoming a specialist registrar. They described FM as good for doctors in their mandatory scheme. Non medic practitioners also shared same feeling:

"... Why should I dedicate myself to promote this programme [FM]? Does this system acknowledge my efforts? You dedicate your profession to serve the public, but nobody cares, even the public themselves..." [L4.6,nurse].

In addition, incentives for doctors' managerial duties were not explicitly endorsed in the policy, which left it vulnerable to district managers' personal interpretation. Some had considered extra payment as a managerial fee, whereas many districts had dismissed such a right for doctors. A new version of the policy (7.2) revised this shortage, and considered 5-7 % of the budget as for managerial purposes. However, it had still not been enacted five months later. Also midwives complaint about lack of incentives when they were forced to carry out irrelevant jobs, which dissatisfied them:

"... well, I understand that I should try my best to serve people, but why they force me to act as a pharmacy assistant and grill me if I make a mistake? I cannot carry out my main duties because of these kinds of jobs..." [L6.6,midwife].

Lack of incentives other than monetary ones was also emphasized as the reason for doctors doubting the future of FM:

"...you will see this in the coming 2-3 years with no doubt. None of doctors are satisfied here or even in Tehran. Money does not matter at all...this system will not be stretched to cities because it fails in villages. Similar to the destiny of Tehran-Caspian Sea highway, FM will be handicapped in rural places and would be still nowhere after 20 years ...doctors will gradually lead this programme to failure, because of pressures on them to tolerate insults which make them cruel and convinced to destroy either the public or the system..." [L2.4,FD,family doctor].

Some influential policy makers were aware of this, but did not attempt to change it:

"... Implementation is not going well at all. We might have settled doctors and midwives, but the main challenge is to keep them moving along the goals... doctors pass the time looking forward to starting speciality and get rid of this mess. FM needs a doctor to stay with public for many years to manage their A to Z" [N2,PR,senior health official],

This indicates the lack of top policy makers' insight towards motivation of staff.

1.2 Lack of job security

Practitioners had little hope about the future of FM. Because of their short-term contracts, they looked at FM as a temporary programme that did not secure their position:

"...due to (short-term) contracts, doctors and midwives have the least trust in the future (of FM). They keep asking us: will the implementation be continuing until the next year? This is the worst possible scenario for implementing change"
[P3,GMU,senior provincial health official].

Unfortunately, lack of hope in the future of FM was not just among doctors in their mandatory scheme. Civil servants in the DOH had the same feeling, mainly due to their insecure and unsustainable position:

"... if I had time to become a specialist registrar, I would have done so. I do not see a future in this programme. We are despising it here. The sooner one can separate himself from this system, the better rescue he would find for himself..."
[L2.3,FD,family doctor].

Some doctors felt as prisoners who were counting seconds to breathe fresh air:

"...do you think I am here for what? It has a high deprivation index so I can end it sooner. I need no money; I just want to finish it as soon as possible. ...I will surely leave this and am counting seconds towards its end..." [L4.4,FD,family doctor].

In addition, although practitioners other than doctors, midwives and nurses were officially considered as members of the health team, they were completely separate. Even their working hours were different, because of which they felt insecure:

"... I am not in FM (member of health team). We were told that all staff are members of the [health] team, however, nothing has changed. I do not think they will renew my contract after this..." [L3.7,E,local health technician].

Worse still, in centres with more than one midwife, there was a clear distinction between those working in FM and those not. Such an environment discouraged unity to build up an encouraging working environment.

1.3 Lack of respect

Despite policy makers' presumptions about the impact of higher pay on practitioners' motivation, lack of respect damaged their morale:

"If the MOH thinks doctors are happy because of 500,000TM monthly payment, this system will collapse. This huge work load, while I have to tolerate lots of insults, is not worth this [little] money. I wish I could hit people who insulted me..."
[L5.2,FD,family doctor].

Such an environment made doctors so pessimistic that they rejected the proposal of becoming specialists in FM after working as an FD for a while:

"...even if I get paid as much as a FM specialist, I am not going to continue in this system. They [DOH] are not even committed to the agreement that they forced us to sign. How could I stick to such a dream with these unreliable people"
[L1.2,FD,family doctor].

Worse still, despite the policy emphasis and the crucial demand, nurses had an unstable position in the health team, because of which they criticized FM:

"...they treat us as their slaves. We do not know whether they [DOH] would recognize nursing as a profession which is essential in any health services including this? I am sure they want to torture us with this insecurity to do whatever they want..." [L6.3,nurse].

Some implementers called FM as the project, which induced it is temporary and would be finished soon like any other project:

"... there is no job security and pension in FM... the project of FM is likely to be finished and bye!...many educated people keep telling me that after five years, they (MOH) might give you (provider) some money and terminate the project. The majority believe that (FM) would not succeed..." [L2.5,midwife].

Feeling it temporary raised the practitioners' apathy and reduced their commitment:

"...money is a powerful external tool to change behaviour, but it cannot make change on its own. We have done nothing to strengthen practitioners' internal motivation. We are depreciated this time. Every single one of us gets into the system to make a difference, however, he becomes cynical after a while..."
[P4,provincial health manager].

In addition, reduced user fees were addressed as one of the main reasons for decreased respect of doctors and threatened their dignity. Doctors accused the public of not

appreciating cheap products, only respecting whatever is obtained with difficulty and is expensive:

"Look! The clearest aspect of FM for public is cheap services. Our people do not appreciate cheap and easily accessible products. If we do not pay for something and obtain it for free, it becomes worthless for us. This precisely happened in this reform, by providing doctor, drug, and medical services at the cheapest ever possible price. I used to do the same job at a city clinic, where I had great respect. Here, patients insult and hit me ... " [L1.2,FD,family doctor].

A number of practitioners linked the reduced fees to increased unnecessary work, unrealistic expectations and increased drug consumption due to public over-utilization:

"...the DOH and the MIO are guilty for all these unfortunate things. They put GPs on sale. People accuse GPs of everything. 24 hours a day, 7 days a week a doctor with just 170TM (8 Pence) has been provided for them, and they still insult us. They used to come 5.00am to make appointments for 3.00pm. They had to wait all that time with no right for objection and were happy to pay more. What about now? While they are prepared to stand even one hour in a bakery queue, they object to 10 minutes waiting to see the doctor... the DOH put us on sale and we became cheap (for the public)..." [L5.3,FD,family doctor].

They were not only doctors who complained about the consequences of cheap services. Other practitioners also addressed the negative side effects:

"Guess what proportion of people who come to the [health] centre really need help? Some people come around only to spend their time and take some drugs for fun...we have to fight with people because of these cheap fees ..." [L4.10,E,health centre personnel].

Some branded the reduced fees as the central policy-makers' intentional attempt to reduce GPs' status. They felt that even the poorest people could afford three fold more fees:

"I think the visit fee must be at least 500-700TM. I am sure there is an intention to make doctors valueless (with emphasis). It does not look like an accident. 170TM for each (doctor) visit has intention, as well as ignorance its behind. There was no doctor here beforehand so people had to commute 100KM to see a doctor. Now, because of very cheap tariffs, they visit us for funny reasons... I promise even the poorest people afford 700TM. FM was implemented to diminish doctors' reputation. If the government is honest in making services affordable, why has it not subsidized water and electricity bills for the poor?..." [L2.4,FD,family doctor].

The rate of public visits to health centres and use of services went up dramatically, not necessarily for better quality of services or users' understanding about the benefits of FM, but because of the significant reduction in fees:

"...do not mistakenly assume that people will go to health centres because of better services, or are happier because of the great environment here. They visit us because they pay only 170TM, compared to 3000TM outside. That is it..."
[L6.5,midwife].

Although the reduced fees improved equity and affordability of services, it harmed the prevention and health promotion aspects of FM:

"...how can I expect a student wash his hands and care about his personal hygiene, while his poor parents do not care enough to pay a little to visit doctor and take medications to treat his parasitic disease?..." [L3.7,E,local health technician].

The harmful effects of an increasing unnecessary workload were another complaint:

"...I can show you lots of examples of unnecessary injections which were done because of patients' insist. If the drug was reasonably expensive and the injection fee was real, I am certain its rate would come down... people treat us like their slaves once we inject them. I am prepared to pay from my pocket, but do not get 17TM (less than one pence) as the injection fee. It is an insult..." [L6.6,nurse].

This was why the more knowledgeable villagers called for an increase in fees to encourage the preventive aspects of FM:

"... increasing fees is necessary to screen the real patients. Low fees have faded the position of FDs by unnecessary visits. We cannot achieve true goals of FM with this... fees must be increased at least same as that of other insurances (SSO, MIO,...) up to 30% contribution by patients (now 10%)" [L2.2,councillor].

Alternatively, as the government insisted on subsidizing services, some called for free services rather than low charges:

"It is better not charging patients, rather than taking this ridiculously little money. Keep my words: doctor's position will be undoubtedly diminished within the next two years. FM was introduced to destroy GPs..." [L4.5,FD,family doctor].

1.4 Delay in payment

Wage arrears were another reason which lowered practitioners' morale:

"... my salary is 1millionTM in name, but unfortunately it is not paid in full. Every month I get paid a partial payment of 500,000TM, while the rest depends on their (DOH) generosity for 5 or 6 months later or even more... how can I take this programme seriously?..." [L5.4,FD,family doctor].

Because of the arrears, practitioners lost their patience and faith in the implementers:

“...we do not get our money by the end of each month... after lots of lamentation and groaning (laughter), we get paid something which has no flavour... you have to steer your eyes on the road waiting the money comes or not (laughter)...”
[L2.6,midwife].

Worse still, the partial payment was not a defined fraction of practitioners' income. It was the same for all practitioners, which was described as unfair and discriminative:

“...we face discrimination even in partial payment. A midwife in X, whose total salary is 280,000TM, is paid exactly the same partial payment as her counterparts in deprived area of Y, whose full salary is almost double. The case is also true for doctors. Equal partial payment of 500,000TM for a doctor with monthly earning of 1.4MTM and his colleague with total salary of 700,000TM is unfair...”
[P7,PR,provincial health expert].

There was another practical problem in relation to capitation payment, particularly in health centres with borderline registered population like 3000, or 5500. Practitioners were less willing to work in centres with less than 4000 population. In centres with transitional number of inhabitants, like 5500, doctors resisted recruiting a second doctor, as to secure a higher income. One single-handed centre had as many as 6600 population. District authorities, particularly in inaccessible villages, overlooked such breaches to retain doctors. There was an attempt by doctors to work in population-dense villages to get paid more. Many did not care how the responsibilities for such a big population could be met by only one doctor.

1.5 Poor working condition

Practitioners doubted the sustainability of FM because of poor working condition. Doctors, who worked in health centres without living-in facilities, were instructed to spend night shifts in A&E at hospitals:

“...in centre X without living-in amenities, because our doctor gets fully paid without any night shifts, he has to spend night shifts in the city hospital...” [L1.1,DA,district health manager].

Night shifts in hospitals, which were irrelevant to FM and against the policy dissatisfied practitioners and led to their objection:

“...I am here (rural health centre) 8.00am- 4.00pm. Sometimes they (district health authority) force me for night shifts in hospitals with no incentive. I have to come back here again the morning after. This is an obvious injustice...” [L1.4,midwife].

1.6 Poor contracts

Despite the existence of sufficient practitioners, the format and content of their contracts did not encourage many to join the reform. They were asked to sign a contract that was branded unfair and against their dignity and interests. They were treated as contractors by the MOH with no sick leave, holiday entitlement, pension and insurance. Implementing in a rush left the legal framework undeveloped, which ended up with practitioners' anger:

"What reform? It is just a reform in name. As a citizen who delivers service to villagers, I am not even entitled for health and treatment service that my target people are, because I am not insured ... even a street-sweeper has his off hours, why should not we have that?..." [L2.5,midwife].

Worse still, doctors (though not other practitioners) were asked to provide financial collaterals in the interest of the MOH to be granted a contract, which offended them:

"...practicing medicine is not a business. Why doctors called contractors and are asked to provide promissory notes? OK, if it mandatory by law, why just for doctors? Are not midwives and nurses members of health teams?! They are doctors not burglars. Asking them to settle in deprived areas, inhibiting them from many amenities, while they have to go to the bank and buy promissory notes which makes them financially obliged, is an obvious exploitation that interferes peaceful and efficient practice..." [N6,O,national union,physician].

Because of the lack of other employment opportunities, most doctors had no choice but to accept such conditions, however, dissatisfied and angry:

"...sometimes I feel my throat is getting pressed. I wish I had become whatever but not a doctor. I live in a society in which doctors are valueless. My dignity has been smashed here. I do not care about money, please do not destroy my personality ... if the implementation is going to continue this way, I prefer to work as a waiter in rural Australia, but not get the MOH money..." [L2.4,FD,family doctor].

Practitioners felt insecure because of the lack of a pension:

"...I have been working here for one year and a half, but even five years like this means nothing. It is like I have not been here even one day ..." [L1.3,nurse].

They were forced to sign contracts with no detail about their time commitment, earning, etc. Contracts were often delayed and sections about time, money, and employer responsibilities were missing. Practitioners were pushed to sign and return the contract to the officials quickly; otherwise, they would be likely to lose their job:

“... They [the DOH] sent a contract that was blank. There was only my name and the basic salary there. They can easily manipulate my salary. Even if I notice they have done so, I can say nothing ...” [L4.5,midwife].

As a result of feedback and practitioners' objections, the welfare aspects of contracts such as pension, time off and leave were later revised. Doctors were not considered as contractors anymore, so they were not supposed to provide financial collaterals. However, the basis of payment in contracts was still vague for many practitioners.

1.7 Ethnic tensions

In the diverse provinces of Golestan, tribal issues were a source of conflict for many reasons. Some doctors were irritated by ethnic tensions in their audit:

“...I know these people do not like me because I am Fars (Persian ethnicity) and Shiite (religion), whereas they are Turkmen and Sunni. I know they calculate my salary in a way that I get less than my Turkmen counterparts. In case of absence, I am certain they deduct my salary four times more compared to my Turkmen colleague. Outstanding doctors are always chosen among the Turkmen here... whoever Mr. E (head of district health authority) likes, is paid more...” [L2.4,FD,family doctor].

Although issues like the language barrier was emphasized as a reason for prioritizing local doctors to practice in rural Golestan, the tribal preferences was probably the real one:

“...most people prefer to visit Turkmen doctors. Women visit doctors more than men. They are more illiterate than men so it is more difficult to explain their complaint (to non Turkmen speakers)...” [L1.8,village teacher].

In addition, the district health authorities who worked in ethnic minority areas, preferred to recruit local doctors:

“...being knowledgeable and speaking the local language are both essential. I admit that non-local doctors have been successful, however, the ability to speak the local language is really an asset to engage with people...” [L2.2,DA,district health expert].

It was not only managers who preferred local doctors but also some local practitioners did so because of its facilitating role to teach the public:

“...a doctor who speaks the same language (as the public) is better, because patients are mostly elderly who do not speak and understand other languages. People could be also trained better with a local doctor...” [L2.5,midwife].

Local doctors from the private sector also pointed out the greater likelihood that local doctors would stay in the village for longer, in addition to the possibility of efficient communication between the doctor and patient:

“A doctor is a reliable person for the public. Some people cannot express for instance their psychiatric complaints in other languages than their mother tongue. Actually, they prefer to do so... people want their doctor to stay and live along with them. Locals are better in this regard ...” [L6.10,private doctor].

1.8 Rationing

Irrespective of significant variations between health centres, the policy tended to rationing doctor's behaviour in prescription without considering differences and customizing patterns. Doctors complained about their limited choice in prescription, as well as effects of such limitation on their efficiency. Even though 270 drug items, a long list of laboratory tests, x-rays, and ultrasounds could be prescribed by family doctors, however, doctors were demanding expanded prescription power. Some doctors complained that they were not allowed to order even simple tests like FBC (Full Blood Count) in FM scheme (but GPs are allowed to prescribe such a test and in general):

“FBC is the most important lab test which is the mother of all other tests to distinguish many diseases. I do not know why we are not entitled to order it (in FM)...” [L2.4,FD,family doctor].

This was echoed by managers:

“...our doctors ask to be entitled to order HBS-Ag, taking into account its relatively high prevalence in our region...” [L2.1,DA,district health manager].

Such factors prohibited doctors from providing a basic level of service for their assigned population, as well as wasted resources by causing unnecessary referrals to higher levels. Nonetheless, the purchaser insisted on doctors' freedom to choose whatever benefited the patients:

“...we reduced drug numbers from 390 to 270, based upon doctors' freedom of choice to prescribe whatever they want for their patients...” [N15,PU,senior insurance manager].

In very remote parts of the country, doctors complained that due to rationing drugs, some necessary items were out of access:

"...some drugs like third generations (sephalosporins), and serum injections have not been included (in the list)..." [L2.3,FD,family doctor].

In the meantime, some items were being expired because of their rare rate of prescription:

"...I have 273 items in the warehouse, most of which are not prescribed, like Idoquinole, Plazil, and Teophilin, which I cannot even return those. 100 items are mostly prescribed ..." [L1.3,nurse].

2 Impact on private practitioners

Despite the opportunities that FM provided for practitioners, the private sector was opposed to FM. Because of rationing, working conditions, and a lack of dialogue with private practitioners when the policy was being formulated, many experienced GPs who had been practicing in villages for many years did not join FM. Even at the price of losing their jobs or a significant reduction in the number of their patients and inevitably their earning, they kept themselves away from the implementation:

"... We should have considered the private practitioners who had invested in the rural areas prior to implementation. Because of FM, many established doctors were forced to close down their clinics, where they had been working for long... (looking at me): Doctor! You used to run a clinic yourself. You know how long we attempt to gather some patients. We directed many patients towards the health centres. Over a night, we demolished the business as well as the reputation of many private and established doctors ..." [N5,PU,senior insurance policy maker].

Unfair and unilateral contracts discouraged some experienced private doctors from practicing in FM:

"...our contracts were just for three months. Every other night we were asked for night shifts. To be honest, the way they treated me I felt I am less than X (a group of immigrants in Iran)... what is labour's law? Even labourers have their own rights..." [L2.8,private doctor].

Despite the policymakers' awareness, FM created job opportunities for many practitioners at the price of making many others jobless:

“... our main strategy was helping the private sector, not leading it to bankruptcy. We did not intend to destroy the practitioners who had been working there for long. We should have prioritized and showed them that we were not their enemies...”
[N17,PR,national health expert].

This was why FM was originally planned to be implemented in cities, where there was no choice but to contract the private sector. Its concurrence with Behbar, which was not the choice of the MOH, destroyed the fragile presence of private practitioners in villages. Private doctors were afraid of joining despite being verbally prioritized for recruitment. However, they complained that FM had ruined their business:

“Private doctors complain a lot. Implementing a big change has some losers... most of them did not use their priority to be employed [in FM]... I think they must be considered within a comprehensive plan. We ruined 100s of established private doctors to recruit the 132 family doctors in health centres... They [private practitioners] are our colleagues. 24 pharmacies in villages also underwent bankruptcy. We are not allowed to bury alive a pharmacist who has invested a lot in a village.. .” [P1,PR,provincial health manager].

Most private doctors in villages were forced to close down their clinics and move to other places. A few still continued to practice, even though their patients were halved in number. Lack of consideration about employing experienced private doctors made some doctors call the reformists criminals:

“...from my point of view, FM has had no positive effect (with emphasis)! Believe me! It has only expanded the specialists' income. People at the ministry [of health] did something for their own benefits and disappeared then. I suppose the MOH is the most criminal ministry in Iran.” [L6.9,private doctor].

A small percentage of private doctors joined FM not because of desire, but because of the lack of other choices to work:

“... Doctors hugely lost in this implementation... the MIO contracted some doctors who had no choice to survive but to join the programme ...” [P5,O,provincial union].

The policy did not allow private doctors who were employed as FDs to practice in their own clinics, except in the three cities, where the task was handed over to private doctors. To be awarded the contract of a family doctor, they had to close down their clinics. Echoing the public, private doctors requested to leave people free to choose their doctor, rather than forcing them to visit doctors in health centres:

"...this is the public fund, not the minister of health's aunt money! Let people choose whoever they like. Why a doctor who had practiced here for 14 years, was forced to close down his clinic and leave the village? They caused him to feel that his biggest enemy is the MOH. That doctor will become a psychotic ..."
[L2.8,private doctor].

Employing some practitioners at the price of demolishing others' businesses was also condemned and branded against the law:

"...despite the 4th plan (for development) and article 44 of the constitution, the current implementation is expanding the public stewardship and is demolishing many GPs' practices in villages and small cities ..." [N6,O,national union for doctors].

Establishing FM practice only in health centres was seen as wasting human resources by putting all eggs in one basket:

"...this minister [of health] has allocated all public funds towards health centres. Doctors, who had studied many years using the MOH's scholarship, were fired overnight...the minister diminished all of us to improve a village health centre.... should the private sector be murdered?... I used to visit 100 patients a day (before FM), now hardly reaches 30... my capital was the public's trust, I could not share it with others..." [L6.10,private doctor].

This doctor did not want to share his long-term achievements and position with other doctors in health centres, as the majority of them were inexperienced newcomers. Despite a huge loss in his income, he was not willing to cooperate. The policy was not flexible enough to accommodate the established private doctors and respond to their requests. Therefore, some private doctors preferred to be jobless, rather than joining the implementation:

"...I prefer to close down my clinic and become a taxi driver, rather than working in the health centre [FM]..." [L5.9,private doctor].

The history of the MOH was mentioned as the main reason for this mistrust,:

"I cannot trust them [MOH] because of its black history. People like Mr. X [the former minister of health] or Mr. Y [the more previous minister of health] were treacherous towards me... these people's past is black from the beginning. They are dreaming that they are doing something good, but FM has only filled the specialists' pockets..." [L2.8,private doctor].

Nevertheless, the policy was rightly revised to permit the provincial DOHs make fee for service contracts with private providers other than doctors, including pharmacists, laboratories and radiology clinics.

3 Impact on the public

Impact of the implementation of FM on the public is investigated here under four categories:

1. Resistance to rationing
2. Preference for specialists
3. Desire for unnecessary prescriptions
4. Reduced user fees

This study did not investigate direct accounts of the public, but was restricted to public representatives as explained in Chapter 5.

3.1 Resistance to rationing

Restricting the public's access to health care was unwelcome. The common result of rationing was public resistance. As policy-makers knew that there would be resistance to gate-keeping, they called the reform FM to overcome the public reaction:

"People are generally resistant to limitation. This was why we advised implementers to call the reform FM that indicates positive aspects such as active care, instead of calling it 'referral' which might have a negative annotation" [N7,O,senior insurance policy maker].

"...people do not like rationing and being controlled by Behbar ..." [L1.7,councillor].

"...similar to their urban counterparts, people prefer to be visited by specialists (without being referred by FD) ..." [L1.8,Imam].

Lack of choice to visit their desirable doctor, jeopardised the public's cooperation. Even though the public complained about rationing, the significantly reduced fees meant they did not respect FM entirely. However, serious concerns existed for expanding implementation to cities, where people would be asked to pay for health insurance. There

is serious doubt therefore to what extent the implementation will be successful, once it requires a public contribution to the premium:

"...taking a number of deprived people with least expectations, whom do not know their rights and restricting them to a doctor, is not a masterpiece. You do this to the labour community; they will hit you..." [N13,PU,insurance official].

Despite trying to convince the public about the benefits of referral and FM, it was difficult for them to accept such limitations. Perhaps the pattern of implementation in Golestan, in which people were free to choose their doctor (in seven small cities which had contracted private doctors), while health centres were in charge of preventive care, caused this complication. Because the 95,000 people in the seven cities could register with private doctors, who used to be their own doctors, their freedom was intact. On the other hand, the remaining 725,000 people, who were registered with FDs in health centres, could not select their doctor:

"...since Behbar came in, we are restricted to the health centre. Despite our desire, we are not allowed to see more experienced doctors, which upset people. I have noticed that in Z (a small city 25 KM away), people can register with the doctor, whom they fancy... I prefer to have the Z model here. If FM is to satisfy people, we prefer to be free for choosing our doctor..." [L2.9,imam].

This reflects the impact of implementing FM in two different ways in areas close to each other. It also indicates how important it was to contract experienced doctors who were trusted by the public. Enjoying their support during implementation improved the public view of FM.

3.2 Preference for specialists over generalists

Bringing the public in line with the referral requirements was difficult because they preferred to seek care from specialists rather than GPs:

"...we live in a society with the taboo of special dominancy and technology prioritization..." [P2,PU,provincial policy maker].

The public did not consider GPs as suitable for managing even simple issues:

"...I am not happy (with FM) because we are only visited by GPs. They are not as capable as specialists in the cities. Their knowledge and experience is limited to general medicine..." [L1.8,imam].

Worse still, people did not consider the doctors who were in their mandatory scheme as the experienced ones:

“Most doctors in health centres are inexperienced general physicians who are passing their mandatory scheme. For me, experience is more important than knowledge...because they are young, they are not as good to manage some cases ...” [L5.9,villager].

There was a consensus that recruiting recently graduated GPs in their mandatory scheme was against the purpose of FM:

“...Behbar is destroying FM because the doctor who practices in the health centres does not possess the specifications of a FD. S/he is a temporary and mandatory doctor, whose attempt is collecting the money and leaving the village...” [N13,PU,insurance policy maker].

Even illiterate people in small villages expected to visit specialists for simple issues such as a common cold. There were several reasons for this. First, specialists were promoted in the mass media and promoted themselves given their power, money and influence. Second, although there was a two-fold difference in (private) visit fee for specialist and GPs (7000 vs 3000TM), the visit fee itself was low enough to be affordable even by the poor. Third, the general cost of health services, particularly for visiting doctors was low compared to other services, e.g. hairdressing. People therefore looked at FM simply as a gate to specialists:

“... I go to the (health) centre because the doctor there knows to whom refer me. It facilitates my referral” [L2.5,Villager].

Many people emphasized that they visited family doctors just for the commonplace complaints:

“...I just see the family doctor for colds or this sort of things...” [L2.9,imam].

Specialists pleaded guilty to creating such a picture of GPs. Some would not accept GPs as the gatekeepers:

“...no specialist will be working under GPs gate-keeping. Relationships are not healthy and monitoring tools are inefficient in this country. Who guarantees that privileged information is prevented?...” [N7,O,senior insurance policy maker].

Specialists also responded to the public's irrational demands more easily, which in time became common. Doctors, who took scientifically-based actions, were bypassed by the public:

"People act on the basis of the desirability principle. Once my right decision ends up in my infamy, whereas my colleague's wrong decision brings him more glory and income, wrong procedure is being inevitably promoted. Monetary motivations are the strongest ones. Specialists who undertake any measure to retain their clients, not only do not come in line with the referral, but actually oppose it"
[N7,O,senior insurance policy maker].

3.3 Demand for unnecessary treatment

People had illogical demand for some services, mostly drugs. As drugs were cheap and accessible, people liked to be prescribed many unnecessary items. A number of patients insisted that doctors should prescribe drugs for them. They got offended if a doctor resisted doing so:

"... one of my troubles is convincing people who need no drug.. Unless they pay 3000TM for drugs, they think that the doctor is not knowledgeable ..."
[P4,provincial health manager].

Sometimes, people visited and paid another doctor who was not afraid of responding to their demands:

"... People worship doctors who bombard them with injections, antibiotics, pills, etc, ..." [P3,GMU,senior provincial health official].

In the current competitive medical market in Iran, most patients' requests were granted so as to retain clients. Ironically, most prescribed drugs were not used until they expired. The fact that family doctors have been instructed not to prescribe more than 2.5 items in every prescription, limited their influence on the public and lowered their respect, because the people's unrighteous demands were easily answered upon their visit to the specialists:

"Some drugs that family doctors are not permitted to prescribe are being easily ordered in some clinics. Changing this culture is difficult..." [P4,provincial health manager].

Such a situation made the public presumptuous to challenge the doctors' prescription:

"...I took my two years old severely diarrhoeic son to the [family] doctor. He only prescribed ORS and assured us that he will get better. I told him that the problem

was infectious and that ORS could only compensate his salt deficiency. He replied: I am a doctor, I know what to do... I took him to the specialist who prescribed an injection and tablet. The first doctor did not act properly" [L1.8,councilor].

This villager was a grocer who evaluated the doctor's prescription as incorrect. He paid a specialist several times more to give him what he wanted. The specialist was also not afraid to reject his request. These actions bypassed the family doctor and decreased his authenticity before the public.

In addition, rejecting a request could even end up in a argument or fight, whereas a positive response led to escalating the prescription items, both of which challenged the doctor's position. Worse still, the patient was able to fulfil his request from other sources than a FD, which worsened the GP's reputation:

"...we have a very bad job. Half of the patients complain of cold and leg pain. When you cover those problems, they remember their digestive difficulties. When they are leaving the room, they also remember their palpitation. Sometimes they demand to be prescribed for drugs they are running short of them, irrelevant to their current complaints..." [L2.4,FD,family doctor].

Furthermore, preventive behaviour was not strong in the society, which made it difficult for family doctors to increase the public's compliance to care more about health. People did not seek care prior to becoming extremely ill:

"... We do not normally visit a doctor before we become disabled, or unable to move..." [L1.8,villager].

3.4 Reduced user fees

People were happy with the lower fees, because they could enjoy almost free doctor, drug and inpatient services. The public's interpretation of FM was not referral, health, family doctor, etc. Most thought the reform was the insurance log-book, rather than FM or even Behbar:

"I am so happy because of the log-books [in response to how he felt about FM]... we visit doctors and take drugs at a cheaper price. There was a card beforehand, which many doctors did not accept. Drugs were also not subsidized. Using the log-books we could ask the doctor to refer us to the specialists..." [L1.7,villager].

Because of chronic deprivation in rural areas, people did not care about what entitled them to services. They only minded two issues: no difference with the urban population and the freedom of choice:

“...at the beginning of the registration process, people were not that hopeful. They did not believe we were going to give them the log-books...” [L6.9, councillor].

They expected to use the log-books even for dentistry services, like holders of other log-books (not differentiating FM with other schemes):

“...some come along showing their [Behbar] log-books, while asking for dentistry services. They probably think that because the log-book was issued by the MIO, they are entitled to dentistry services like other MIO insured people” [L2.7, village dentist].

Possessing such an insurance log-book was interpreted as a sense of dignity by the public. It acted as a filler to their long-term gaps with their urban counterparts. Being mostly unaware of the alternatives to the Behbar log-book, the public was happy because of being recognized in the society.

Nonetheless, villagers still felt inferior because of the extent of their entitlement and freedom of choice, compared to other types of the log-books such as the SSO:

“...many villagers feel inferior because they are unable to use their [Behbar] log-book for the same services as the city inhabitants do ...” [N15, PU, senior insurance manager].

4 Summary

The perceptions and behaviour of local staff and the public were shaped by three factors:

- Public resistance to rationing and preventive focus;
- Private practitioners role ignored; and
- Public practitioners' rights and needs overlooked.

The public and practitioners –private or public- were critical of implementation and were highly doubtful regarding its sustainability, so did not take the implementation seriously and as a permanent task. Practitioners and public's expectation of FM was different from

what was being implemented, so they lost their trust in implementation and had little positive view towards it.

First, due to autocratic approach and lack of local understanding, the public long-term habit to visit specialists even for common place reasons and sometimes as a fashion, was ignored. As a result, people resisted rationing. The majority of the public viewed FM simply as a gateway to visit specialists, albeit their main criticism was their restricted freedom of choosing doctors. They did not care about health promotion and rationing behaviour. Rather they perceived the policy as being Behbar log-books, which facilitated cheaper access to specialists and to some extent reduced their difference with city inhabitants. Some specialists encouraged this behaviour by inducing "reverse referral" and damaging public services reputation for their patients. FM policy being made by a small group of specialists with potential interests in the private sector, and given their influence on the society and mass media, they had influenced the public towards valuing specialty and undermining primary care and general practice. Failing to include these powerful people or their representatives in the policy cycle deteriorated their confidence in the policy and determined them to stand against it. Excluding established and experienced doctors who were trusted and might encourage people towards FM and primary care, resulted that implementation failed to tackle these powerful opponents.

Second, as a consequence of lack of attention to and investment in human resources which was discussed in Chapter 8, no situation analysis was carried out to identify losers and winners of implementation in advance. For instance, private practitioner's role and their requirements were ignored. As a result, it was not only not attractive to them to join FM, but they were forced to close down their clinics and leave areas where they had lived for a long time. Their business and reputation were destroyed overnight and those influential actors who might potentially act as advocates of FM, became its serious enemies. Ironically, this also damaged the privatization of services in FM, an aspect that the policy had encouraged. The policy did not consider incentives and benefits for experienced and established local doctors. For example, there was no difference in the income of an experienced doctor and a recently graduated GP who was in the mandatory scheme. Private doctors were afraid to risk their reputation in FM, which reduced their income and made their duties more difficult. Therefore, they opposed the implementation and discouraged the public to utilize FM services.

Third, public practitioners were not considered the real clients of the reform. Their rights and benefits were not fairly recognized. Practitioners' welfare and basic rights were overlooked. Almost all public practitioners felt humiliated and dissatisfied by the way they were recruited and treated. Unfortunately, policy makers' mechanical view towards practitioners resulted in taking hostility guards against the MOH, instead of organizational dependence and ownership. This was because of policy shortcomings and managers' behaviour. Policy makers assumed that because of a several fold increase in practitioners' payment, they would be happy and obey whatever was requested of them. For instance, contracts were unfair and unilateral and practitioners' working condition was hard with little incentives. Particularly, doctors were called contractors and were asked to provide financial collaterals to be contracted, which led to their negative feeling and lack of trust. Reduced user fees were another gesture that adversely affected practitioners' morale. Although it was introduced to facilitate the public's affordability, the fee was too low and made people suspicious about the good quality of services, so they paid little respect to family doctors. In the context that public were not prepared for rationing, it caused serious conflicts in practitioner-public relationships and reduced both groups' trust in the policy and in the implementers.

Chapter 10 Discussion and conclusion

Introduction

This thesis had six objectives. The first, to explore and select theories of implementation of change, was covered in Chapter 2 and the second, to identify and categorize facilitators of and barriers to the implementation of change, was covered in Chapter 3. In Chapters 6-9, the third objective of describing the facilitators of and barriers to the implementation of FM in Iran was covered. In this Chapter I turn to the final three objectives. The Chapter consists of six sections:

First, the main findings of the empirical research are summarized. Second, before addressing objectives 4-6, the findings are explained in the light of the theoretical framework outlined in Chapter 2 (completing objective 3). The third section addresses objective 4, given the fact that most selected theories have been developed in high-income countries, their applicability in Iran is reflected upon. Fourth, I discuss ways in which this thesis might contribute to the theoretical literature (objective 5). Finally, the strengths and limitations of the study are addressed before identifying policy implications (objective 6) and future research needs.

1 Summary of findings

Three interrelated categories of factors affected the implementation of FM in Iran:

- aspects of the policy (content), (described in Chapter 6);
- the existing environment (context), (Chapter 7);
- the interaction between the two (process), (Chapters 8 & 9).

1.1 The content

Despite FM being welcomed because of its potential benefits to improve the health system, it failed to address several issues and was not based on a correct understanding of the situation. This arose because the policy making was autocratic, in which FM was formulated by a small group of people and imposed on others. Implementation of FM in Iran was obstructed because of trying to impose the policy without taking into account various stakeholders' views. In addition, the policy was ambiguous and not realistically

tailored. It was a merger of two contradictory policies (FM & Behbar) with divergent goals. Such a situation led to a lack of ownership, trust, common language and cooperation between actors. The policy lacked a secure and distinct financial basis such that many perceived it as unsustainable and did not submit themselves seriously to its implementation.

1.2 The context

The health system was not prepared to accommodate the prerequisites of the policy. Despite some advantages, such as the pre-existing PHC network that facilitated implementation, the health system impeded implementation for several reasons. First, it lacked a defined macro-level philosophy of governance, which made it difficult to steer FM towards a clear destination. As a consequence, the policy was vulnerable to individual discretion. Second, FM was not integrated with the financing system. Third, the insight, knowledge and resources of implementers, particularly at national level were doubted by many. And fourth, politicians used health care to gain political advantage, rather than recognizing it as a citizen's right, although some individuals, such as a former minister of health and a few MPs, strongly advocated FM.

1.3 The process

1.3.1 Ineffective policy execution

One consequence of the autocratically determined policy was a wide gap between the policy as formulated and as executed, because of a lack of local understanding, such as aspects of payment and recruitment. Ineffective bureaucracy jeopardized the situation. The merger of two contradictory policies (FM & Behbar) by two organizations (the MOH & the MIO) who had a history of inter-sectoral hostility contributed to the problem. Moreover, political considerations took precedence over a scientific approach and undermined meritocracy. Aspects of human resources were not considered sufficiently, so investment in them and tailoring their expertise for the task of implementation were undermined. As a result, an effective centre for leading the implementation did not form, which resulted in lack of cooperation and collaboration. Instead, because of such hostilities, the purchaser-provider separation that was put into practice hoping to increase the quality of care, ended in mistrust, fighting and accusations.

1.3.2 Local antagonism

The content of the policy and process of implementation shaped the perceptions and behaviour of local practitioners and public representatives who were critical of what they experienced. Their expectation of FM was different from what was being implemented, so they did not trust in the policy for several reasons. First, the policy overlooked the public's opposition to rationing and a focus on primary care. Second, the role of private practitioners was not considered, so their potential contribution was ignored and lost. Most established private practitioners suffered, so they became enemies of FM. Third, public practitioners as the main service providers in FM were not considered key clients of the reform. Their rights and benefits were overlooked and as a result, they discouraged the public to use FM services, which in turn hindered its implementation even further.

1.4 Overall

Imposing a policy (FM) the concept of which was supported, together with implementation of another policy (Behbar), in a health system which lacked clear governance, as well as organizational shortages such as inappropriate finance and an inadequate insurance system, ended in dissatisfaction, frustration, a waste of resources and loss of trust. Implementation might have increased provision of some services in rural areas, but fulfilling its main goals was doubted. It settled doctors and midwives in villages, but despite better payments, not only did it not improve practitioners' satisfaction and motivation, it actually reduced their trust in the health system, harmed many private clinics, and decreased their cooperation. Worse still, villagers, whose satisfaction and equitable service provision were highlighted, were unhappy about rationing, lack of freedom of choice, and their difference with urban counterparts. They demanded an insurance log-book, such as the SSO, to entitle them to free and unlimited services. They opposed Behbar therefore and challenged the policy. The implementation ignored the main features of FM, such as prevention and health promotion, and threatened the concept of FM.

2 Theoretical explanations of findings

As explained in Chapter 2, the findings of this study will be discussed on the basis of a four-fold theoretical framework (Harrison,2004):

- The *interpretive frame* is used to address the applicability of the 'garbage can' notion (Cohen et al,1972) of health governance in Iran, which is deemed to be the

core obstacle to implementation. The 'Multiple Streams' model is employed to explain the conjunction of opportunities that resulted in the formation of implementation. That also points to the effects of policy actors' perceptions, behaviour and beliefs on the implementation process.

- The influence of the *administrative frame* is clear when discussing the hierarchy of decision making and the effects of a top-down approach to the policy. It is used in conjunction with other frames to explain the formation of policy and address effects of autocratic policy making in Iran.
- The *bargaining frame* uses a few elements of advocacy coalition framework in conjunction with network theories to explain formation of the policy, and impact of actors' beliefs and interaction on its implementation.
- The *institutional frame* employs institutional rational choice theory to illuminate the ways that social and political institutions constrained possibilities for action, by the government and other players. This frame is complemented by incorporating communication models including principal-agent perspective.

Although I used the four-fold framework to organize my approach and thinking, my understanding of what took place with FM in Iran was guided by the application of several theories, which were used solely or in different combinations with each other based on the structure of the dynamic model of health policy analysis (introduced in Chapter 5).

2.1 The content

Formation of FM

The way that the policy was formed was the main reason for its problematic content. The formative stage of policy making and the consequences that are affected by institutional and situational factors include coincidence (with Behbar) and external events. The process can be portrayed as a series of interrelated games in which bounded rational actors pursue their interests as well as those of their institutions. In particular, merger of FM with Behbar and the consequence of that affected the implementation of FM a lot. Thus, theories of policy implementation are not sufficient to explain the formation of FM. This is why, acknowledging that they are not theories of policy implementation, I used 'multiple streams' of Kingdon (2003) in conjunction with network theory (Marsh & Rhodes, 1992) in an interpretive frame to explain how the policy was formed.

Kingdon (2003) views policy implementation as being determined by three streams: problems, policies, and politics.

Three problems pushed FM onto the agenda. First, health indices revealed that the existing PHC could not respond to the public's requirements anymore. Second, anarchy in the insurance system, disintegration of the national health account, and the increasing expense of health services drew attention to the need to reengineer the system to a more efficient one. Third, the increasing prevalence of chronic conditions such as diabetes, obesity and high blood pressure despite several years of preventive attempts brought the issue to the fore. Although all these problems were taken on board, other, mostly social conditions such as increasing inequity and patchy insurance coverage received more attention. The values and beliefs of the former minister of health, his deputy, and some other stakeholders as regards equity, quality of care, and the Islamic revolutionary ideals, contributed to magnifying problems. This matches the first stream of Kingdon (problems), which he categorizes as 'perceptual, interpretive elements' that constitute the need for a change of policy.

Coincidental opportunities also contributed to implementation of FM. Almost at the same time that Behbar was approved in parliament, the World Bank agreed a loan of \$125million to the government of Iran to equip the infrastructure, including health centres. Despite many concerns regarding how the money was spent, the overall impact of the loan was significant in making health centres better. The coincidence was so intertwined that the majority of managers in health authorities did not recognize that the funding source for much equipment such as vehicles, laboratory facilities and examination sets was not Behbar. Given the MIO's refusal to pay for infrastructure and equipment out of Behbar resources, such an opportunity was vital to formation of FM.

Policies constitute the second stream. Although a wide variety of ideas were considered, the idea of FM as the basis for rationing services was welcomed. Its technical feasibility (the PHC, human resources, etc) and acceptability (assigning a family doctor to everyone and removing financial barriers by Behbar) contributed to the rise of the policy. The idea of FM was then adopted by a small group of medical specialists who created a policy community network (Marsh & Rhodes, 1992). Bressers and O'Toole (1998) indicate such a network concept:

"...has been fuelled in part by recognition of the complex array of actors involved in policy choices as well as the inability of contemporary government to move unilaterally without incorporating the constraints, preferences, and resources of other social actors".

The network led by the former minister of health (2001-5) and included the CEO and some selected managers from the MIO, the MPO, the SSO, the deputy of health in the MOH, a few MPs, and a small number of civil servants with specific interests from the MOH and the MWSS. All together the network did not exceed 15 people. Many influential stakeholders including the chancellors of universities, the GPA, the IMA, journalists and MPs were not included. Despite agreements on micro aspects of the policy, the network faced complexities and constraints in achieving common goals. The existence of a small group to define policy is not rare (Smith,1993). For instance, studying partnerships in health in Australia and New Zealand, Lewis (2005) points to the strategic information ties which were concentrated around a few people.

In addition to common values and interests among network members, resource mobilization and knowledge exchange occasions (such as the flagship and other courses) enhanced the performance and achievement of their partnership (Hajer & Wagenaar,2003). The personal experience of the former minister of health and his deputy (2001-5) facilitated such mobilization. Even though they were both surgeons, so by default should have had little inclination towards primary care, their appointment transformed policy subsystems and gave greater prominence to the national unit for health sector reform within the DOH. Whatever the reason for their passion, the policy group's top-down approach to the policy might have been legitimate in taking the political climate and strong opponents' conflict of interests into account. Their effort to develop FM was distinct from their role as surgeons, which illustrates two issues. First, institutions do not fully determine actions, rather, they provide a set of sanctioned options. Second, actors may choose to break the rules, irrespective of the consequences, for many reasons such as their personal beliefs, their party benefits, and their religious faith. Scharpf (1997) considers the role of idiosyncratic factors in the policy process, particularly the people in leadership positions who are less bound by organizational rules than subordinates.

When the government changed in 1997, elites who possessed novel beliefs, norms, and preferences had joined the policy network. The network redefined the problems, made themselves knowledgeable and rode on the wave of policy change to push FM onto the agenda (Nelson,1978). The notion of FM and referral existed before. But it was the insight and preference of the health minister, who had been the deputy for health previously that

obtained a parliamentary vote of confidence for establishing FM. He appointed a task group for devising the policy within the DOH in the MOH. The centrality of the ministry of health accelerated the process and drew attention to FM as the single significant strategy to enable reengineering of the health system.

Marsh and Rhodes (1992) also consider issue networks. This is a less integrated perspective, comprising a large number of members with broad values and backgrounds, whose resources and power is unbalanced. While policy communities lead most policy decisions, issue networks have limited access to the policy process and therefore may have less influence. Both are best perceived as the two ends of a policy subsystem continuum. However, there was no issue network during the formation and implementation of FM. Although the policy was formulated by a few well-known policy makers, it was perceived as an imposition from above and biased towards the views of the former minister of health and his deputy. Such perceptions had serious consequences such as lack of ownership, lack of cooperation and mistrust. It also left the policy vulnerable to personal interpretation by local clinicians. Discretionary practice that aimed to counter the constraints and other unwelcome consequences of FM, eventually became a routine coping mechanisms that adversely affected implementation (Lipsky, 1980).

Politics (the third of Kingdon's streams) also played a fundamental role in formation of FM. He considers three elements here: the national mood, pressure group campaigns, and administrative and legislative turnover. Because of the weak structure of NGOs and pressure groups in Iran, there was no clear indicator of national mood for or against the policy. If there is public support for an initiative, it is more likely to survive, and vice versa. Due to the absence of distinguished interest groups, politicians did not have an indication of the level of support or opposition. Further, no public poll was conducted to determine public opinion. Although public representatives declared their overall support for the policy, particularly for Behbar which enhanced access to services, no evidence was found indicating a national mood about FM. Rather, public rejection of rationing indicated their mood against the need for referral to access specialist care.

The public were not told about the benefits of FM and their priorities were not considered in policy design. There was a lack of local understanding in designing the policy. Long-established views of the public, such as resistance to rationing and preference for specialist care, were overlooked by policy makers, intentionally or because of lack of insight. Mechanistic approaches to the policy meant policy makers failed to understand

people's preferences. Therefore, not only were the public in rural areas not satisfied, but they perceived the policy as restricting them and putting them in a worse position than people in cities. The public did not therefore support FM and did not welcome practitioners, which in turn jeopardized the public-practitioners' relationship. Sabatier and Jenkins-Smith (1999) argue that although public opinion is seldom knowledgeable enough to affect policy specifics, it can certainly alter general spending priorities and the perceived seriousness of problems.

The three streams of Kingdon's model occasionally flow together, whereby a 'policy window' opens (Kingdon, 1985). This presents a temporal opportunity for a 'policy entrepreneur' to promote a case and for choices to be made (Zaharadiaz, 1999). The parliament opened the policy window by approving Behbar and coupling the streams together at a critical moment. The window opened in the last days of the Persian year (12th March 2005), when the majority voted for the budget with little challenge regarding diversion of funds. However, such diversion of funds adversely affected its sustainability.

The fleeting opportunity of Behbar encouraged the advocates of FM in the MOH to push their policy of FM onto the agenda, which had previously been abandoned for many reasons including insufficient funds. The policy entrepreneurs were highly skilled at coupling. They deliberately defined FM in terms of referral as the only solution to fulfil the aims of Behbar. They seized the opportunity to initiate action by convincing the MWSS to purchase services in the form of FM. As Kingdon (2003) notes, the success of policy entrepreneurs to promote spill-over in adjacent areas is enhanced by underlining a similar analogy in legitimising their arguments. In politics, loyalty is a luxury that few can afford (John, 2003). At that time, there was a high likelihood that the policy would rise or fall on various government agendas, or the opportunity would be lost. Another opportunity to implement FM would have been unlikely in near future.

Incorporation of two policies resembles what Walker (1971) calls a 'momentum phenomenon'. Explaining policy formation at high levels in the U.S., he argues that when there is a breakthrough in a policy domain which was previously neglected by the government, it is often followed by a surge of administrative or legislative policies in that domain which have persisted for a long time. The new policy of Behbar revitalized FM, which had been neglected for a while. This initial policy shift and deliberate association of Behbar with FM had spill-over effects. Such effects secured the position of FM by ideologically matching it with the purpose of the Islamic Revolution. Therefore, it became

difficult for the MIO to reject FM and referral as the operating strategy for Behbar, despite the fact that pay for preventive services were fundamentally in conflict with its mission. However, such a fundamental paradox, incorporating two contradictory policies, harmed implementation and proved to be causi-reversible. Nonetheless, given the governmental change that took place immediately after starting implementation, it became impossible for the new government to abandon the reform.

This quick series of activities to operationalize FM also resembled the notion of "minimum winning coalition" (Ricker,1980), in which the goal is to maximize net benefits at the margin, that is, in the short-term. The MOH compromised by accepting the merger of the two policies. It was a deliberate attempt to maximize average benefits over the long-term advantages of a planned FM policy. The MIO compromised, too, by accepting to pay for preventive care, even if it had no choice by law than to do so.

Using Kingdon's multiple streams to explain the formation of FM at the national level is particularly helpful because it integrates policy community networks with broader events and addresses the idea-versus-interests dilemma (Hayward,1991). It connects the broad political event (the ideological stream and the revolutionary concept of access for the poor and enhancing equity) to a narrow sectoral development of health services (rationing on the basis of FM) in specific ways. Although one did not determine the other, political events outside the health sector influenced the solution (Behbar) when the window opened (the seventh parliament). The model also indicated the importance of self-interest (the former minister of health, his deputy, and a few national policy makers) in addressing the significance of ideas in two ways. First, solutions to respond to the problems were developed not simply on the basis of efficiency or power, but also equity. Second, political ideology was a good heuristic in the ambiguous environment of the health system in Iran. Politicians, particularly MPs who voted for Behbar, used the idea not only to address the public but also to define themselves. The policy entrepreneurs whose purpose was to couple Kingdon's three streams, bent the ideological proclivities on some occasions to take advantage of fleeting opportunities (Zahariadis,1996).

Nonetheless, the model can be criticized for not providing tools for a meso- or micro-level analysis or closer examination of the coupling process. In summary, these factors influenced the direction of the policy but did not determine or facilitate its implementation on their own. Further, the role of policy entrepreneurs is vaguely defined, but it does introduce the notion of rational actors attempting to navigate the turbulent and

disconnected streams. Exactly how these agents operate and the impact of their values and norms on their function are not specified. These will be discussed later using Institutional Rational Choice Theory.

2.2 The context

2.2.1 Health care governance: 'Garbage can' model of choice

The study revealed the lack of a clear and recognized philosophy for the health system in Iran as a big challenge. Instead there was a combination of models, the role of each being questioned even by high-ranking national policy makers. Feldman (1989) defines ambiguity as 'a state of having many ways of thinking about the same circumstances or phenomena'. Ambiguity led to confusion, vagueness, and stress. It made the background of policy making uncertain, both for macro aspects such as the future of the reform and for micro issues such as the required budget. The incremental unveiling of policy over time did not reduce the degree of ambiguity (Wilson, 1989).

The heart of the barriers to implementation was that the policy was made by 'organized anarchies' (Cohen et al, 1972), where ambiguity was rampant. In addition, the public were excluded from the debate, as were the majority of decision-makers inside the MOH and the MWSS. The 'garbage can' analogy is a useful theoretical viewpoint for understanding what occurred. The government (both the current and the former which started the implementation) were characterized by two general features. First, fluid participation. Staff turnover in the MOH and the MIO was high. In particular, subordinates drifted from one decision to the next so that prioritization of policies lacked any systematic manner.

Second, because of ambiguity, the main aims of the reform were unclear for key actors. Although the majority praised the policy, every one boarded the policy ship to follow his/her own or organizational priority, which were contradictory on many occasions. As Weick (1979) suggests, choice becomes less an exercise in solving emerging problems and more an attempt to make sense of a partially comprehensible background. Therefore, contradiction and paradoxes appear. For instance, although the provincial DOH was supposed to strengthen its function to serve FM, capitation payment was cut and the number of administrative personnel not increased. In such situation, there was no room to use the available information either via provincial feedback or studies conducted by unions such as the GPA (Feldman & March, 1981).

It is hardly novel that policy makers sometimes do not make their objectives clear. The existence of a rationale for a policy avoids decisions being made without precise preferences, particularly when there are time constraints. Nonetheless, the strategic decision to implement FM concurrently with Behbar was to some extent facilitated by such opaqueness. Cohen et al (1972) describe such a situation as “a collection of ideas rather than a coherent structure”.

Ambiguity of goals increased the degree of hostility between the two frontline implementers: the MOH and the MIO. The primary aim of the former was to bridge the gap with primary care in cities, whereas the latter attempted to improve access to services in rural areas for the poor. Such a mismatch in the main goal had difficult consequences. For instance, the MIO did not accept the capitation payment proposed by the MOH, refused to sign a common agreement for five months, and did not cooperate to expand the programme to cities, despite the clear emphasis in the policy. This arose because the policy for the MIO was insurance for villagers and contracts with the MOH to provide necessary services, mostly treatment. The MIO was not interested in health promotion. Despite such differences, both implementers agreed upon the name of FM for the policy. Divergent and to some extent contradictory approaches to the policy resulted in actors' confusion at all levels.

2.2.2 Effective policy brokering

The advocacy coalition framework (ACF) emphasizes policy brokers as drivers of policy in bottlenecks. The role of parliament was important, though was sometimes inconsistent. On the one hand, the surprising budget approval opened the window and completed an important stream to materialize the policy. Some influential MPs in the Commission on Health, who were simultaneously engaged in the policy network, played an extraordinary role in brokering the policy. They created empathy in legislatures and brought some degree of organizational common sense. They persuaded the two implementers to cooperate. Being aware of a long history of poor inter-sectoral cooperation in Iran, parliament sagaciously planned the programme in a way that the two ministries were obliged to cooperate. They deliberately appointed the MOH as the policy maker and the MIO as the purchaser. Such a legal distinction ensured FM was not buried by the MIO, which was opposed to paying for preventive services. In line with the ACF, the MOH reciprocally revised its strategic position based on a new situation (budget approval in

parliament) and the need to react to an external event (the recent split of the MIO from the MOH).

Parliament also performed as a strong policy broker to keep the implementers committed to the common task. The head of the Commission on Health and a few other MPs engaged in several activities to mediate the MIO and the MOH's interpretative tensions and practical battles. Policy brokerage was more important to the success of the dominant coalition than its own strategies. Parliament also played a role in establishment of the National Office for FM (NOFM) within the Ministry of Health. The office played not only a role in bringing the two implementers closer, but listened to neglected stakeholders including the GPA and the IMA, as well as some key individuals. The former president (1997-2005) also acted as a strong policy broker. As the head of the Supreme Council for Health and Food Security, he intervened at a delicate time when the two implementers' fragile coalition was about to collapse.

The strong role of parliament because of legislative turnover, which affected the policy in a dramatic way, was in contrast to the poor role of interest groups. Parliament initiated the concurrence of FM with Behbar which altered the former. Policy networks can be a major source of inertia (Marsh & Rhodes, 1992), unless policy equilibrium is punctuated (Baumgartner & Jones, 1991) resulting in a policy innovation. A sudden influx of conservatives, who were ideologically against inequity, into the seventh parliament (2003-7) of the Islamic Republic, revitalized the revolutionary motto of enhancing the quality of life of the poor and those in rural areas. Baumgartner and Jones' (1993) argue that radical policy change takes place only when there is a positive feedback in the policy subsystem. Because of the strong link that Behbar presented to the ideological purpose of the Islamic Republic, it attracted parliamentary support, even at the price of a sudden diversion of funds. Both timing and chance were important factors. The Commission on Integration in parliament altered the annual budget bill for the year 1384 (2005), proposed by the government, in order to divert funds into Behbar. The proposed budget for Behbar was not based on any rationale and calculation. It was allocated by reducing funds for a few civil projects such as dams and road construction. The majority of MPs voted for Behbar because of the insurance log-books, which were expected to bridge the access gap between rural and urban residents. They overlooked the rationing nature of the referral strategy or probably did not realize it.

The Commission on Social Affairs in the parliament proposed the Behbar bill. It emphasized the role of the MOH as the policy maker but had little idea about FM. The very emotional process of gaining approval for the bill surprised both the MOH and the MWSS, which had been lobbying the parliament respectively for FM and Behbar on a smaller scale. Progress in parliament resulted from concern to support the poor rather than improving health. Many MPs might have voted for the bill to promote themselves to the public and to attract votes for the next election. They were in the dark either about the consequences of referral or the impact of FM on Behbar. Probably their interpretation of Behbar was significantly different from the proposed implementers, even the MIO's. Thus, despite its overall support, parliament's controversial interpretations of the policy triggered a few MPs to oppose implementation. Some MPs opposed referral and suggested that people be left free to seek services from wherever they preferred. This was followed by the Commission on Health in parliament (interview with the Vice President of COH on 06.10.2008: <http://www.farsnews.com/newsh.php?hoz=46>) that accused the MOH of failing to implement FM in villages. Extinguishing the harm of such powerful voices at a time that implementation needed support was a difficult task that failed.

2.2.3 Knowledge and insight of policy makers

Within the general process of policy change, ACF has a particular interest in understanding policy-oriented learning (Sabatier,1999). Such learning refers to relatively enduring alterations of thought or behaviour that result from experience and/or new information and that are concerned with the attainment or revision of policy objectives. Policy-oriented learning involves increased knowledge of problem parameters and the factors affecting them, feedback concerning policy effectiveness, and changing perceptions of the probable impact of alternative policies. The framework assumes that such learning is instrumental, that is, that various members of different coalitions seek to better understand the world in order to further their policy objectives (Eberg,1997). They resist information, suggesting that their core beliefs may be invalid or unattainable, and use formal analyses to buttress and elaborate those beliefs or attack their opponents. Because there was not a real pro- and anti- FM coalition per se, there was no 'partisan mutual adjustment' in either policy. This facilitated an adjustment (learning) of the two policies by the provider side (the MOH) and revision of the policy because of the 'enlightenment function' (Sabatier,2007) of some external stimuli, such as the irregular feedbacks from the periphery as well as sporadic reports such as the one produced by the GPA.

ACF argues that learning is unlikely to transform into policy change unless the actor who learns possesses sufficient power (incumbency) to affect the course of governmental programmes (Sabatier & Jenkins-Smith, 1999; Hansen & King, 2001). This perspective provides a rather self-evident claim that major policy change in the wake of external shocks is more likely if an incumbent coalition member revises core aspects of his/her belief system (Nohrstedt, 2005). Policy transfer models argue that the motivating factor of policy learning or voluntary policy transfer is the policy makers' demand for effective solutions to particular problems (Dolowitz & Marsh, 1996; Rose, 1991). To obtain such remedies, the only organized attempt was a small policy network within the MOH, whose members had minimal knowledge but some relevant expertise and experience to carry the task out. They did not research to identify the most appropriate strategy and instruments to practice FM. Rather, they devised the policy features by drawing lessons from different sources, including their own experience. The incompatible composition of the network and the lack of expertise in the policy group resulted in designing a flawed policy, which made a significant contribution to implementation failure. The main reason was that the solutions were neither tailored to the public nor deliberately pertinent to problems faced in the Iranian context (Considine, 2005).

2.3 The process

2.3.1 Ineffective policy execution

2.3.1.1 Lack of balance between policy subsystems

The advocacy coalition framework focuses on sectoral subsystems made up of individual actors rather than communities: not only interest group leaders, but also agency officials, legislators from multiple levels of government, applied researchers, and perhaps even a few journalists (Sabatier, 1999), who are actively concerned with a policy problem or issue, and who regularly seek to influence public policy in that domain (Sabatier, 1997). Within the subsystem, ACF assumes that actors can be aggregated into a number (usually one to four) 'advocacy coalitions'. Sabatier suggests that actors are glued within competing coalitions by 'belief systems' which range from core beliefs such as the relative priorities of health, 'policy core' (the proper scope of government), and secondary aspects (the best way to deliver policy). Core values are the least susceptible to change (Sabatier, 2007), while policy beliefs may only change following external shocks to the subsystem (such as the socio-economic environment). He considers secondary aspects are subject to change

following policy learning and refining in accordance with new information and the 'enlightenment function' of policy analysts.

A top-down approach to the formulation of FM prevented any subsystem from being formed. For instance, the media and journalists were excluded. Such an approach to the media was surprising, taking into account many previous occasions when the MOH had effectively employed it for its programmes such as breast-feeding, vaccination, family planning and traffic accidents. Some authors suggest that there is a direct causal link between media attention and rapid policy change (Jones and Baumgartner, 2005). They mention a few examples of how high media attention to smoking, alongside other reasons, in the early 20th century caused a dramatic rise in tobacco consumption, whereas negative media coverage since the 1960s has reduced it. However, it is not clear whether it is the media or the public attention that determines the nature or intensity of the policy improvement.

Regarding the composition of members in the sub-systems and coalitions, no applied researcher was a member of any coalition. However, because actors had multiple jobs, some politicians, legislators, policy makers, and managers in the team were also researchers themselves or applied others' research that they had commissioned. Because the two ministries (MOH & MWSS) lobbied for two separate policies (FM & Behbar), each had its own subsystem. The FM subsystem was more organized and slightly better led in formulating policy. The glue that temporarily linked the two approaches in one coalition was the common core belief in combating inequity. Consistent with the ACF hierarchy of belief systems, such a belief was strong enough in both groups to adopt FM with Behbar, despite the diverse direction and strategy of the two. Using the guidance instruments (change in rules and budgets in parliament) to realize their own policy objectives, the two groups reached agreement to concurrently implement FM and Behbar. Under parliamentary pressure, both implementers compromised on their own secondary beliefs.

2.3.1.2 Lack of collaboration and coordination

The ACF highlights the possibility that many conflicts in policy implementation cut across the divide between policy makers and those formally charged with putting policy into practice. Formation of a fragile coalition to match the two policies of FM and Behbar failed. Not only were the main missions of the MOH and the MIO contradictory but their diverse interests were viable to overcome the difficulties of the referral system. Although

parliament put some efforts to combine different resources to enrich the quality of health services for the rural public, institutional heterogeneity led to coordination problems.

Zafonte & Sabatier (1998) address such lack of coordination by distinguishing 'strong (formal)' from 'weak (informal)' coordination. The implementation of FM suffered from a lack of both kinds. Assuming that actors share core beliefs and trust each other, the authors argue that actors might alter their behaviour to at least create weak coordination in the coalition. Neither prerequisites existed in this implementation. Because of mistrust, they lacked the opportunity for informal coordination, which is particularly important among members coming from different organizations with legal or structural impediments.

The relationship between beliefs and organizational inter-dependencies also highlights the lack of coordination. Fenger & Klok (1998) categorize beliefs as congruent, divergent, and unrelated. They argue that competitive interdependency occurs when the functional tasks and resources of actor A interfere with actor B's ability to take action consistent with B's goals (and often vice versa). In contrast, symbiotic interdependency occurs when the functional tasks and resources of actor A contribute to Actor B's goal (and often vice versa). On such an occasion, actors have an incentive to exchange their respective resources in order for each to attain its goals. The relationship between the MOH and the MIO could be categorized as symbiotic interdependence. Assuming they had congruent beliefs, coordination in the same coalition should have been relatively easy. In contrast, divergent beliefs plus competitive interdependency will lead actors to be in different coalitions. Implementing FM in Iran was a cross-diagonal case. The two actors (MOH & MIO) had congruent beliefs (equitable services) but were competitively interdependent (one provided healthcare and promoted health while another purchased healthcare services). However, the ACF recognizes their policy core belief of enhancing equity as the principal glue for being categorized in the same coalition (Sabatier & Zafonte, 1999).

2.3.1.3 Lack of training

Individual and organizational experience have a substantial role in assuring desirable professional practice and clinical outcomes (Dudley et al, 2000). The surprising window of opportunity opened by parliament caused a rushed start to implementation. As a result, practitioners were not trained both technically and socially on necessities of FM. A small community of health professionals could have played a key role in compensating practitioners' lack of expertise by organizing training courses for newly-graduated doctors,

nurses, etc, in rural areas (Tantivess & Walt,2008). Nevertheless, given the transitional period of presidential change, if the rushed implementation had not been started and practitioners had not been settled in villages, there was a high probability that implementation would not begin at all.

On the basis of Schofield's (2004) model of learned implementation, in order to fulfil the aims of a new policy, local staff seek to obtain necessary information to guide policy execution and draw lessons from several sources. Two categories of knowledge: technical and procedural are required to do so. The model suggests that procedural knowledge has an important role in adapting and utilizing technical information, by increasing skills and capabilities of practitioners to deal with impediments. This thesis revealed a lack of knowledge for both types in implementing FM, let alone its usefulness.

Schofield's model can also link the lack of training to the lack of issue networks and NGOs in Iran. It also links to the substantial lack of collaboration in the country to explain learning for policy implementation. She mentions that when practitioners discover the strategies to operationalize new policies, they do not hesitate to share such knowledge with others in their formal and informal networks, the so-called 'communities of policy learning and practice'. She suggests that collective learning among service providers as members of policy learning networks can encourage and steer a policy through to implementation. However, lack of collaboration and absence of any effective issue network, including all stakeholders, inhibit the environment in which knowledge and information are shared and exchanged among agents.

2.3.1.4 Following institutional interests rather than common goals

Institutional Rational Choice (IRC) broadly conceives institutions as systems of rules structuring the options available to actors. Rules can be formal regulations as well as informal social norms and shared expectations. By sanctioning some courses of actions and encouraging others, this system of rules establishes a frame within which actors act. In conjunction with Kingdon's definition of the 'policy entrepreneur', actors in the IRC can also be a group functioning as a 'composite actor', which covers many of the actors involved in the policy process such as: ministries, interest organizations, political parties, and NGOs. Scharpf (1997) mentions the advantage of the framework as treating organizations as a single actor rather than analysing the internal actions of an

organization. It approaches the policy process as a strategic interaction between actors, a dynamic game.

March and Olsen (1989) argue that institutions are the main independent variables in structuring political decisions and policy outcomes. Institutions simplify decision-making by providing alternatives that are more or less readily available and plausible. They provide familiarity, reduce psychological uncertainty and eventually lead to a belief structure which constitutes the routinization of meaning as well as the establishment of coalitions. Moreover, institutions rationalize idiosyncrasy, heterogeneity and diversity by shaping decision makers' preferences, thereby introducing a measure of uniformity. Altering incentives or disincentives, changing the balance of power among policy makers, introducing new technology, or shifts in organizational secondary beliefs open windows for non-incremental policy change.

IRC recognizes actors' ideas and interests in relation to their institution. The concept of 'ideas' covers both cognitive dimensions (descriptions and theoretical analysis of the social reality) and normative dimensions (values, beliefs, and identities) (Campbell, 2004). Institutional rational choice (IRC) can also contribute to the analysis of the preferences of the key actors that revitalized the abandoned policy of FM. The MIO had the least institutional interest in providing or even paying for primary care. Rather, its priority was to insure people and pay for their treatment when they got sick. On the one hand, Behbar was not so much an insurance policy as a government subsidy to support the villagers because no premium was paid by the insured. On the other hand, the MIO had been recently separated from the MOH and needed to prove its independence. Therefore, on the top of the MOH advocates' success in selling FM to the MIO, the Behbar funds were an attractive incentive to enhance the MIO officials' agreement to accept FM which ran counter to their institutional strategy.

In addition, following the long-standing principle that whoever possesses the money controls the game, the MIO's gesture to accept FM accelerated the flow of funds towards the organization. This opportunity was the best tool to end the long-term dominance of the MOH over the MIO. The MIO agreed to implement Behbar in the framework of FM by signing bilateral contracts. However, given the chronic embedded partialism in Iran, the MIO paid reluctantly for primary care. The lack of cooperation of the two in this common task has been so great that the former deputy for health in the MOH (the current advisor to the minister in FM in 2008) asked the president in a recent interview (10th August 2008,

<http://www.farsnews.com/newsH.php?hoz=46>) to return the FM fund from the MIO towards the MOH. He threatened that unless the request was fulfilled, FM could not succeed. On this basis, the game played out between the two players over the common implementation of FM and Behbar left FM as a loser to Behbar.

For all these reasons, no effective partnership was established between implementers, which harmed implementation. However, at the local level, the public's cooperation to mobilize resources and their contribution to improving the infrastructure was far ahead of official networks. While government and its hierarchical institutions remain important, policy analysis must also take into account a range of open-ended, more ad hoc arrangements which increasingly affect decision-making. Hajer and Wagenaar (2003) talk about 'new spaces of politics' where there are 'concrete challenges to the practices of policymaking and politics coming from below'. In their view, policy analysis has to become more deliberative: less top-down, involving expanded networks, and more interpretative, taking into account people's stories, their understandings, values and beliefs as expressed through language and behaviour.

Partnerships range from the bottom-up, locally self-generated and voluntary, to top-down, centrally steered and government mandated programmes. The former appeared to be impossible because of the uncooperative background, while the latter so-called 'managed networks' (Lewis, 2004) were created by local government officials (DOH and district health authorities). Despite some benefits, these types of partnerships faced substantial difficulties in Iran. Partnership in the public sector often reflects efforts to institutionalize the positive effects of networking (such as increasing diversity by involving a greater range of actors) by requiring organizations and programmes to have more formal connections with each other (O'Toole, 1997).

Establishing the National Office for FM (NOFM) was an attempt at appeasing personal interpretations and integrating control of implementation. The Office started to include more stakeholders and encourage partnerships. However, the way of steering the implementation and the speed of the process limited the scope for progress. Again, public and practitioners were not effectively engaged and their views were not considered. The attitude of the policy network group appears to have undermined the level of trust required to influence such a programme. Thus, because of fundamental institutional and to some extent ideological differences, the establishment of the NOFM remained only a symbolic measure that made no real difference.

Worse still, there was managerial change, during which a large number of experienced policy makers were replaced with inexperienced staff soon after starting the implementation. This restricted policy making even more. People with a lack of expertise and minimal knowledge took over the task of revising the policy and planning for its execution, which harmed implementation. This may stand as the main reason for reluctance towards the policy, lack of trust between different actors and minimal cooperation.

2.3.1.5 Ineffective relationship in execution

The relationship between service providers as contractors and the MOH as the policy maker and employer was flawed. On the basis of principal-agent perspective, sub-optimal implementation of a policy is an inevitable result of the structure of modern institutions in which decision makers ('principals') delegate responsibility for implementation to their officials ('agents') such as civil servants in the MOH, doctors, nurses, managers, or private contractors (Buse et al,2005). It explains many failures of top policy makers (principals) because of personal discretions by agents and considers the impact of local actors and their boundaries in executing implementation. However, it does not explain the institutional interests and values of principals, nor the impact of principals' approaches to the policy as well as the way that the policy is introduced.

According to the perspective, principals can only indirectly and incompletely control agents (Pollitt,1993). Agents have discretion in how they operate on behalf of principals and may not even see themselves as primarily engaged in making a reality of the wishes of principals. The perspective opens avenues to link doctors' and other practitioners' behaviour to their own discretion. The majority of practitioners were contracted by district health authorities and, therefore, became civil servants, similar to provincial and local managers. However, the principal-agent approach makes a distinction and leaves room to consider these agents as members of professional unions, such as the GPA. Their discretion opens up the potential for ineffective or inefficient translation of the government's plan, since agents have their own views, ambitions, loyalties, interpretation, and resources which can hinder policy implementation.

2.3.1.5.1 Contracting and auditing performance

The principal-agent insight emphasizes the design of institutions and the choice of policy instruments in the knowledge that the 'top' needs to monitor and control local staff at a reasonable cost. This has led to an increasing focus on the contracts to define the relationship between principals and agents as a mechanism to ensure the principal that its objectives are followed by agents, aiming to improve the efficiency of service provision through market mechanisms (Mills et al,1997). Adopting such a concept for FM, contracts were designed to be signed between the district health authorities and the provincial department of health as the official representatives of the government, and the practitioners.

Sheaf and Lloyd-Kendall (2000) argue that contracts must institute mechanisms to ensure that providers realise a principal's objectives, and embody a strong principal-agent relationship between authorities and providers. In addition, in the setting of primary care, they ask for consideration of two aspects in contracts. First, focusing more on evidence-based processes of primary care, health outputs and patient satisfaction and less upon service inputs. Second, the need for longer-term contracts in order to promote the 'institutional embedding' of the agent in the wider management system. Neither of these was considered while making contracts in FM. Instead, a number of issues diverted the contracting from its intended function and made it an unwelcome experience for many practitioners, which reduced their motivation.

First, the vague macro governance for the health system created a paradoxical environment of contracting private agents, albeit they were public employees. Second, contracts were prepared and drafted with minimal consultation with legal and human resources advisors, even inside the MOH. Most practitioners interpreted their contract as humiliating. Calling providers 'contractors' and asking doctors to provide bank security damaged their dignity. Doctors did not expect such terms being used.

Third, contracts were too vague, unilateral (many commitments for the provider side against minimal responsibility for the principal), and no-specific in many important aspects such as time and payment. Fourth, contracting was complex and bureaucratic. Practitioners were given only a couple of hours to sign a contract after months of delays and the contract had to be signed by officials at three levels. This caused delayed payment and wasted time, money, and energy. Practitioners did not receive a copy of their signed

contract which made them suspicious that the principal was going to exploit them and damaged mutual trust.

In contrast, Tuohy (2003) points out how vital a trust-based principal-agent relationship is, as well as a contractual relationship in which actors are relatively well-informed. This might then lead to performance monitoring and information sharing within complex and loosely coupled networks. Thus, the flawed process of contracting, in turn, adversely affected auditing performance.

For all these reasons, contracts discouraged practitioners and adversely affected their attitude towards the reform. Despite the emphasis to expand privatization, the principal was gradually converted to a substantial controller of the reform rather than steering its principles. The MOH highlighted the low incentive the private sector had to invest in primary care in deprived and rural areas as the reason for public expansion of services. However, despite their willingness, the majority of established private practitioners in some areas were not contracted. Instead, government was unable to design and negotiate contracts in a way that ensured the government was able to derive significant efficiency gains from contractual arrangements. As an example, in order to promote privatization and retain private doctors loyal to the reform, rather than making them enemies, the MOH could have subsidized a major proportion of patients' fees to visit private doctors, at least in the early months (Grindle & Thomas, 1991). Experienced and trustworthy private doctors were not allowed to promote the policy and explain the role of referral to the public.

In addition, in order to increase the quality of services, the principal-agent perspective considers performance indicators as essential to ensure the delivery of services is satisfactory and to assess whether they are meeting government objectives or not. Smith (2002) points to four key factors-from a principal-agent viewpoint- that the effectiveness of performance measurement depends on: the extent to which the chosen performance measures reflect faithfully the objectives of the system, the nature and quality of the data, the incentives for practitioners to scrutinize and act upon the data, and the culture of the organization within which the data are deployed. The optimal design of performance measurement systems relies heavily on local factors. If correctly considered, they are likely to offer a highly cost-effective instrument for securing major improvements in system performance as well as motivating practitioners. Unfortunately, the auditing system in FM was flawed in all aspects. There were no defined criteria to conduct audits, auditors were not qualified, the checklists were unknown and kept from practitioners, and the result of

such audits were wrongly and to some extent discriminately applied. As a result, the audit was used as a tool by the principal to judge an agent's performance. Not only did auditing not improve providers' behaviour, but it was abused by practitioners to legitimize their poor performance.

2.3.1.5.2 Purchaser-provider split

Principal-agent perspectives recommend contracting out of services to the private sector if this is regarded as superior to in-house, public provision, or the establishment of more independent public providers, so-called 'public firms' or 'public enterprises'. Purchaser-provider separation that was applied for the first time at this big scale in Iran did not succeed in changing the status quo of primary healthcare. Similar experiences have been reported in decentralisation of secondary care services in Iran (Jafarisirizi et al,2008). Instead, the separation became a reason for fighting, misunderstanding, lack of cooperation and failure of the fragile partnership. Despite this, the majority of interviewees praised the concept of separation for three reasons: they were unaware of either the consequences of separation or the historical barriers before its implementation, they supported the idea to attain their own benefits, or they simply adhered to the common rule of ceremonial talk in Iran.

The separation that aimed to improve the relationship between the principal and agents, damaged the relationship between the two implementers, mainly because of their institutional past. Devil shift (Sabatier et al,1987) encompassed their relationship, particularly on the MIO side. Most actors from each group assumed that they are correct, virtuous, and fair in their judgments. Thus anyone who disagreed with them must be mistaken about the facts, operating from the wrong value premises, or acting from evil motives (Harrison,1976). Such a relationship became a strong barrier to effective cooperation. On the one hand the MIO, that used to be under the MOH, looked at implementation as an opportunity to prove its independence and superiority to its rival (MOH). On the other hand, it was hard for the previously superior institution (MOH) to recognize the MIO, which it viewed as a child, to control the funds. Although both organizations occasionally showed some degree of common language and agreed upon certain objectives, they never became close enough to cooperate. The separation harmed implementation and wasted resources in fighting, when unity and cooperation were essential. This was why the MOH explicitly admitted that due to mismatches between the MOH and the MWSS, people have not experienced the benefits of the reform after three

years of implementation (interview on 20.10.2008:

<http://www.farsnews.net/newstext.php?nn=8707280657>). People were pronounced as the main victims of the disagreement between the implementers, despite lots of meetings to resolve problems.

2.3.2 The process: Local antagonism

Promoting health and increasing the quality of services, particularly through strategies such as FM and referral requires engaging people and building stronger partnerships. Such a cooperative environment may ultimately lead to better outcomes through a coordinated service, where actors and institutions understand each other's roles and have ongoing relationships. Such trust and cooperation leads to opportunities to do more things together (Lewis, 2005). However, experience of FM in Iran could not enjoy effective partnerships, reasons for which are discussed below.

2.3.2.1 Actors' discretion

The principal-agent perspective can partly explain the amount of agents' discretion and the complexity of the principal-agent relationship that was observed during implementation. Implementation of FM started universally for almost 24 million people, accounting for about one third of the population of Iran. FM was implemented on the basis of rationing services through referral, which was a big change and against the public's habits. Coast (2001) argues that whether citizens want agents to make rationing decisions on their behalf is ambiguous. She concludes that citizens also vary considerably in the extent to which they want to be directly involved in making rationing decisions. Agents, in contrast, view citizens as needing them to make decisions. The citizen-agent relationship in this implementation was both imperfect and complex. The vague policy left space for agents' discretion which was difficult to deal with. The degree of discretion and the idiosyncratic behaviour of managers and practitioners occurred for several reasons including: the public's lack of awareness and preparation, historical deprivation in rural areas, and the villagers' longstanding gap with city inhabitants, which had been promised would be bridged through this reform.

In addition, the nature of the policy was distributive (allocating public funds to insure villagers and providing health services for them at a very cheap price). As Ripley and Franklin (1982) suggest, it is easier to implement distributive changes than regulatory or

redistributive ones. Redistributive policies have obvious losers, whereas the cost of the regulatory ones is spread across the population less visibly. Contrary to the benefits of investors, the rationing strategy had a regulatory nature with a potential to restrict specialists and threaten the utilization of sophisticated medical technology. Grindle & Thomas (1991) recommend that likely opponents be identified prior to making policy. Lack of such an analysis caused them to oppose the change in Iran.

Two other factors affected the relationship. First, apart from the pre-existing PHC that facilitated implementation, most contextual factors obscured it by increasing the possibility of individuals' discretions. Lack of preparation in villages encouraged interference of providers by the public, which jeopardized the situation by discouraging practitioners to stay. Second, lack of capability in the MOH and the MIO was worsened by replacing managers and policy makers with officers who had a lack of knowledge and expertise.

2.3.2.2 Failed expectations

Ideas played an important part in the policy perception. John (2003) defines ideas as discourses that are closely connected to political interests, neither determined by them nor determining of them. Both FM and Behbar, as well as the final policy draft for concurrent implementation had a clear ideological component that was illustrated in the implementation slogan: 'improving equity through the enhanced accessibility and increased quality of services'. Wrapping the package of services in the auspicious of FM created a positive picture for people. Many villagers even in remote areas perceived FM as an opportunity to have a personal doctor who visited them at home and actively looked after them. Lots of practitioners, including doctors, expected something similar to what they had seen in some foreign movies. Given the chronic deprivation in many rural areas and the long-term gap in scale and quality of available medical services, the policy was initially perceived as a remedy, and so it was welcome. However, because of rationing care, which was not explained to the public in priori, and given people's preference to visit specialists, it turned into a bitter cultural crash and failed to fulfil expectations.

2.3.2.3 Lack of mutual trust

The degree of trust between different groups of actors was poor. Practitioners did not trust the MOH and its intentions. In a society in which being a specialist was fashionable, the majority of FDs did not trust the government plan to award them the degree of 'specialist

in family medicine' after a couple of years of services. The public also did not trust the government and were dubious about its real intentions. Worse still, the two implementers themselves did not trust each other. Lack of trust led to a lack of common language, low degree of cooperation and partnership, minimal coordination, disintegration, and inevitably led to implementation in ways not intended.

The basis for mistrust varied. For instance, service providers were not considered important clients. Not only did they not engage directly or indirectly in making and diffusing the policy, but their dignity and status were diminished. Some doctors lost their long-established businesses overnight. The way of contracting practitioners and the process of their recruitment negated the positive impact of some innovations such as financial incentives. It also raised practitioners' anger and suspicion. An example was the lack of involvement of doctors in determining tariffs for health services. Reducing user fees to almost zero was on one hand in line with the equity objectives of the policy. But on the other hand, it led to either destroying providers' trust and decreasing their reputation, or over-utilization of the service, both of which were in conflict with the aim of FM. Such a strategy might have been avoided through communication with doctors or consulting their representatives. Over-utilization of services ended in practitioners' high workload leading to anxiety, stress and frustration.

Another example was employing staff at some health centres to carry out duties inappropriate to their qualifications. For example, nurses as pharmacy assistants or midwives as nurses. It was a mistaken coping strategy to address the personnel shortage. It increased mistrust, reduced the quality of care and left practitioners angry, all of which eventually harmed implementation. As Lipsky (1980) points out, when front-line staff face implementation constraints, ambiguous policy content, uncertainty in the work environment, or work-related hazard, they invent mechanisms to counter such problems. These coping mechanisms may partly explain deviations from the expectations of national policy makers. The main hazard for implementation was routinizing such discretions, some of which diverged from the principle of FM. For example, lack of health record keeping in health centres and reducing the emphasis on prevention became routine in the health centres. This confirms Lipsky's view that lack of commitment among senior actors to provide adequate resources, made the work environment unpleasant and affected frontline actors negatively, so they lost their faith in the policy.

Further to the implementers' failure to build trust and partnership, the quality of relationships was also based on political preferences, rather than capability and merit. Even the low proportion of practitioners' pay based on performance was subject to individual opinion. As a result, pay for performance did not enhance practitioners' courage. Instead, practitioners felt abused and punished.

2.4 Conclusion

The implementation of FM is a case study that illustrates the importance of coincidence and opportunism by rational and institutionally embedded actors in pushing a complex reform. In addition, the lack of competing coalitions led to abandoning the idea of reform during unstable conditions.

The complementary theories which were incorporated into the analytical model show the level of competition to define the nature of policy change. Their value is inextricably linked to the narrative of policy change that is selected. Using complementary frames to explain findings revealed that what appears to be a new reform is in fact a continuation of long-term trends towards stronger state control in planning and providing health services, despite the legal emphasis on privatization in Iran. The current actors and policy processes reflect broader policy trends, more apparently the lack of clear health governance in Iran.

Studying the lack of partnership between actors revealed that it is not only theory that is needed to drive implementation, but also more appropriate methods for exploring pluses and minuses. Pure description explains nothing, yet reflects the complexity of reality, while abstract theorizing and modelling explains much but only by ignoring the complexity of reality (Hay, 2002). The thesis also revealed that organizational structures and beliefs are in relation to actors' performance and vice versa.

A theoretically-based policy approach enhanced the understanding of the underlying programmatic ideas and values in policy formulation and its implementation. Centralization of political control, maximizing institutional benefits and 'benefits of scale' to fulfil the revolutionary slogan were the underlying values. The increasing mistrust between actors which inhibited them from cooperation was combined with a strategic miscalculation: relying only on financial incentives as the steering mechanism to encourage practitioners, while the majority of practitioners (public and private) were overlooked and their interests

were ignored. Moreover, the pace and tight steering of the process left relatively little room for a broader public and political debate. The policy process that led to what has become the second revolution in health sector reform in Iran, was in actuality determined by relatively few actors involved in decisive moments, who were pursuing diverse goals with contradictory interpretations. Understanding such a policy network proved to be helpful in appreciating coupling of streams to make real-life policy making and implementation, which contributed in the analysis for the policy.

The policy that was welcomed because of its innovation and incentive for cooperation was badly implemented. Contrary to its purpose, it not only dissatisfied the public but also left the majority of practitioners frustrated. Core to all this disarray was a simple but crucial societal character: the main stakeholders did not make their main goal clear. They adopted the policy with contradictory and clashing interpretations, while prioritizing their individual and institutional interests over the public's benefit. The window of opportunity opened and the policy was adopted on the basis of beautiful and ideal words rather than real solutions to common problems. The policy itself was a contradictory attempt to connect two different problems by two hostile organizations with divergent missions. Despite some deliberate efforts for reducing practical problems, the big divergence between Behbar and FM was too fundamental to overcome the challenge.

The policy was ideal, but too visionary. The two implementers agreed verbally and in written agreements to cooperate. Yet, their efforts to bridge the huge gap in their approach ended in increasing misunderstanding, less compromise, and more fights. Parliament's attempt to split the purchaser from provider ended in mistrust between the two and to some extent depreciation of the essence of FM. The goal seemed to be neither integrating insurance nor improving health, rather it was a political gesture to show that parliament cares about the poor. That is why the cost-effectiveness of distributing log-books to 24 million people, while almost 10% of villagers had insurance overlap, was not evaluated. However, the extent to which FM was really implemented after four years of running the programme remains unclear. To date, almost 2500billionTM (£1.5billion) has been spent on implementation. In return, a big turnover of practitioners has occurred, bilateral agreements have been delayed, per capita expenditure for healthcare decreased while inflation is sharply increased, and the plan for expanding implementation to cities has been postponed for the fifth time. Nonetheless, the implementation could be seen as successful if its main goal was settling GPs and midwives in rural areas, irrespective of their attitude, public satisfaction, and quality.

A significant mistake at all stages was that different actors were not acknowledged and their roles not taken seriously. Therefore, they mistrusted the policy and the implementers, and their cooperation was reduced. It would have been very difficult to universally implement FM without the public-civic partnership. Such a partnership was not meaningfully established at different levels. Although some independent networks coexisted along with the policy network, they did not work together for similar purposes. Rather, they pursued contradictory, personal, tribal, or institutional aims that ended in minimal cooperation and partnership. Given the inadequate preparation of the health system and uncertainties of long-term finance, the sustainability of the policy was the main concern for many, considering the tough period that the country has recently been experiencing.

3 Applicability of selected theories in a middle-income country

Many experts point out the importance of contextualization in both place and time in health policy analysis (Walt et al,2008). Health policy environments in high-income countries differ from those in middle and low income countries, where, for example, there are weaker regulations, regulatory capacity and monitoring systems; lack of purchasing power as a leverage to influence types and quality of services delivered; and more patronage in political systems, among many other differences. In spite of differences between high and low income countries, however, it is increasingly recognized that policy processes are changing everywhere. Over the past 10 years, a significant shift is acknowledged in the nature of policy and policy-making, which points to the involvement of a much larger array of actors in the policy process (Buse et al,2005).

All theories/approaches that were used to analyse the findings of this thesis, have been initiated and developed in the context of high-income countries of Europe and North America. Although some theories have been applied in the context of middle and low income countries, the conjunction of theories in the four-fold framework has not been tested in a middle-income country. As this thesis revealed, the experience of FM in Iran faced a number of facilitators and barriers because of the macro-political structure of Islamic Republic of Iran, as well as socio-economic and cultural specifications of the country, many of which differ from characteristics of Western societies. Furthermore, policy is increasingly shaped and influenced by forces (such as global civil society) outside state boundaries (Keck and Sikkink,1998). The growing literature around issues of globalization reflects the extent to which the world is perceived to have changed. For instance,

exchanges have become faster; and ideas and perceptions spread rapidly through global communications and culture. This section investigates the applicability of the theories used in understanding the story of implementation of FM in Iran.

3.1 Multiple Streams and network theories

This thesis showed the applicability of multiple streams theory in explaining the conditions in which FM was brought to the fore, however, the nature of problems were different from the context in the West. For instance, ideological beliefs rooted in revolutionary ideas of the Islamic republic, such as the importance of equity, pushed decision makers towards reform. Besides, expediency and coincidence accelerated the process of policy ratification in such background. One of main contextual differences between middle and high income countries is the extent to which evidence-base policy making is practiced. Historically, middle-income countries have been behind the latter, so that individuals' power as well as coincidental events, have steered policy more.

Politics was a crucial factor in formation of FM in Iran, but in different ways than Kingdon's background. For instance, the role of individuals and their supremacy over others to push the policy was highlighted. Whereas, organized political frameworks such as advocating bodies or elected parties run the agenda in Western democracies, even though powerful individuals might be behind the scenes in those contexts as well. For example, Dye (2001) argues that even in a democracy like the United States, public policy is made from the top down, not from the bottom up. In his view, public policy reflects the values, interests and preferences of the governing elite. Dye separates policy development from implementation, admitting that bureaucrats may affect policy in implementation, but suggesting that all decisions are monitored to ensure they are not altered significantly. Therefore, the macro picture of the two settings might appear not significantly different. In addition, the thesis revealed the negative effects of imposing policies on lower-level actors as well as high rank stakeholders, who were overlooked in making the policy. It also uncovered the adverse effects of ignoring issue networks and front-level staff on quality of services, as Lipsky (1980) points out, as well as a lack of academics- so called 'epistemic community' networks engaged to justify the policy, as Stone (2001) argues.

However, the experience of FM in Iran revealed additional components to Kingdon's streams such as opportunism and coincidence, without which the policy was unlikely to materialize. Kingdon considers contextual-based flexibility in strategies to fulfil goals.

There are other Western-based models, including Walker (1971), which points out “momentum phenomenon” to fulfil policy by appreciating golden times. However, diversions such as the merger of two contradictory policies (FM with Behbar), have not previously been addressed in the model.

Lack of pressure groups, NGOs, and CSOs because of the nature of the political structure in Iran, is among main differences between Western democracies and the Iranian model of governance. Instead, intra-governmental advocates within the MOH pushed FM onto the agenda. Moreover, legislative influx changes were not attributed to shifting power from one party with political majority with another in Iran. Rather, revolutionary mottos and ideological motivations was a main incentive. Despite fundamental diversities between the two political regimes at macro-level, the third stream of Kingdon applied to the context of Iran based on its unique structure of Islamic republic. All in all, Kingdon’s model appears to be applicable in the context of middle-income countries including Iran, with a few contextual modifications.

The multiple streams showed their sensitivity to the different dynamics in problem definition, solution development and the political processes that brought the three together at a particularly opportune moment in Iran. It showed how the impact of ideas could be explored without necessarily denying the importance of self-interest. It also reshaped the ability of the ‘garbage can’ concept to explain forming a policy in a middle-income country.

3.2 “Garbage can” model

The ‘garbage can’ perspective was a useful notion for investigating the role of health system governance on experience of FM in Iran. Two characteristics: high turnover of actors and ambiguous aim applied here. In addition to these characteristics of the model, embedded individualism in engaged organizations was important. Unlike in Western democracies in which civil servants’ turnover is not subject to political change, in Iran the unstable position of actors because of political shift led to greater ambiguity. Thus, the “garbage can” model applied in this context, but not due to its traditional character in high-income countries. Rather, a unique political regime and governance of health, consisting of an amorphous pattern of different philosophies of health governance made it applicable. Its appropriateness in this context might indicate a lack of transparency and defined governance in Iran. Even some high-ranked policy makers were unclear about the main goal of the reform in Iran. Ironically, ambiguity contributed to formation of FM policy,

regardless of implementation outcomes, which would have been hard to achieve otherwise. Political ideology was a good heuristic in the ambiguous environment of the health system in Iran and pushed some influential individuals' pet policies to the fore.

3.3 Advocacy coalition framework

Sabatier (1999) argues that the ACF was originally developed with a largely American context of federalism in mind and most of the initial applications were on energy and environmental policy in the USA. However, since the late 1980s, it has been applied to a fairly wide variety of policy areas in European and Commonwealth countries. The minimum condition for the ACF applicability is that some degree of coordinated dissent from the policies of the dominant coalition must be possible, which was applicable in the context of health sector reform in Iran.

However, there was no distinct and defined coalition per se in implementation of FM in Iran. Rather, groups of unstructured and influential individuals advocated FM. In other words, despite fundamental differences between the USA, where the ACF developed and Iran, elements of the theory were helpful in understanding aspects of implementing FM including: role of policy brokers; values and beliefs and their impact on actors' behaviour; policy changes as a result of learning; importance of explaining reform to the public; and coordination of executing change. The ACF was a useful tool to anatomize the potential impact of diverse members of coalitions affecting FM. For instance, the media community, applied researchers, and other important stakeholders were among anticipated coalition members, effects of their absence were realized from the ACF platform. Instead of coalitions, there were a number of policy subsystems across frontline organizations including the MOH and the MIO. Therefore, policy subsystem is a more accurate substitute for coalition in this context. As a result, a temporary alliance of the two was formed based on interests (organizational or individual) rather than core beliefs. This was consistent with the ACF which argues that achieving policy change usually requires that an advocacy coalition augments its resources by developing short-term coalitions of convenience with a variety of other groups (Sabatier & Jenkins-Smith, 1999).

The ACF also proved to be an important framework to address some essential aspects which hindered the implementation of FM. Composition of coalitions, coordination among actors and role of training are among examples. The framework overlooks the role of public in coalitions and undermines their preparedness and briefing in core policy change.

It is rooted in the federalism in the USA, in which the composition of representatives of citizens including pressure groups, CSOs and interest groups who negotiate to define and implement the policy on behalf of the public. Whereas, the experience of FM in Iran showed how core policy beliefs are changed as a result of political interests. Embedded autocracy in a theocratic democracy resulted in a top-down approach to policy and a lack of public engagement. These led to resistance to the imposed policy of FM.

The value of the ACF in explaining the implementation of FM also lies in its ability to show the delayed process of policy learning in formulating the reform. Despite leading policy makers' awareness of its necessity, it took almost a decade for the policy to be adopted. Sabatier (1998) argues that in decentralized political systems, such as the United States, coalitions that do not agree with a policy have numerous points of appeal (a court, legislatures, etc) that have different biases. Thus, dissatisfied coalitions can almost always find at least one route of appeal that will substantially block or delay implementation of the new policy. In contrast, in a more centralized system like Iran where routes of appeal are restricted, and civil society organizations and pressure groups are lacking, the dominant coalition might have been able to adopt the policy much more easily. For instance, by convincing the policy broker (the COH in parliament) of the merits of the policy without having to change the views of the other subsystems. However, long delays in implementation challenges the capability of the entire system to respond to societal needs and accommodate change in Iran. As bottom-up studies have shown, there is seldom a single dominant programme being pursued at different levels of the government (Hjern & Porter, 1981).

The ACF showed the virtue of highlighting the possibility of addressing the conflict in implementation by dividing it between the policy makers and those formally charged with putting policy into practice. However, it could not explain why a small group of members of the dominant sub-system (MOH) who were powerful and influential enough to impose the policy earlier and attract funds to conduct pilot studies, waited until they were forced to co-implement it with Behbar. Further, the framework implicitly assumes that actors who hold similar policy core beliefs will act in concert and coordinate their behaviour (Zafonte & Sabatier, 2004; Weible, 2005; Weible & Sabatier, 2005). This was dubious in this implementation. Weible (2005) argues that organizations are unable on their own to produce the necessary resources to achieve their goals, so they must acquire additional resources from others. In contrast to this, even the small team of FM implementers had different approaches to auditing performance, allocating resources, and defining

appropriate services for the package. In line with Schlager (1995) and Schlager & Blomquist's (1996), even some strongly shared beliefs by the two implementers, such as making services more equitable and pooling resources, did not overcome the essential diverse common goal. Such beliefs decreased the probability of successful implementation, either for FM or Behbar.

By focusing on shared policy beliefs within a coalition, the ACF ignores the interest that all individuals and organizations have in maintaining and increasing their viability and welfare. As a result, the interactions within and between implementers substantially diminished and hidden conflict between them flared up. Despite talk about the common core policy beliefs among the coalition, this study revealed the reverse. The main barrier against implementation was divergent macro goals between the implementers as well as their contradictory interpretations of the policy. Given this, the premise of shared belief remains doubtful and the challenge to the theory must be approached more cautiously. A good example is policy-oriented learning which took on a particular pattern in Iran. Due to diverse goals even for the two main policy sub-systems across the MOH and the MIO, each of them resisted information, saw the other as a rival not a collaborator, accused one another's policy core beliefs as invalid or unattainable, and attacked each other as opponents. This is what I call anti-coalition behaviour within semi-established coalitions or policy sub-systems in Iran. Given the different structure of the implementers, the changes and revisions in responding to feedback would also seem to contradict the widespread assumption that institutional differences are primordial. The study revealed that learning was not equally prominent but was still useful in explaining how political interests affect policy choices. Nevertheless, Sabatier (1999) rules out to include such concerns about coordination in the ACF because they are based on an alternative model of the individual.

3.4 Institutional Rational Choice (IRC)

The IRC approaches the policy process as a strategic interaction between actors, like a dynamic game. Such a perspective provided an understanding of the role of institutions, such as the MOH and the MIO in implementing FM. Applying the IRC in this study revealed that it might be accurate to consider members of the policy system, either civil servants or managers, as representing the interests of the organization for which they work. In other word, pursuing organizational interest by members of the key coalition impeded implementers' constructive cooperation. More accurately and, in contrast to the IRC assumption, this study revealed that individuals did not cause this problem. Rather,

engaging two organizations with divergent approaches to carrying out a common task which needed compromise and bilateral understanding reduced their cooperation. The experience of FM also showed the impact of institutional interests to overrule temporary settlements, based on the IRC. It represented empirical validation of IRC's theoretical emphasis on perceptions and trust in policy games (Scharpf, 1997). The extent to which the society was politically contaminated, contributed to such application of the IRC in Iran.

In line with the IRC, the concept of actors' partnership was applicable in explaining the nature of common work in implementation of FM. Such partnerships were centrally steered with specific deliverables and targets defined by the centre rather than the individuals' relationships, which hampered implementation substantially. Undermining meritocracy as a result of political preferences was the main reason behind civil servant personnel changes after governmental change in Iran. This might be one of major contextual differences with Western democracies. Expectedly and similar to high income countries, the notion of path dependency applied in Iran. Because of embedded partialism and individualism in the society, returning to the past was pursued with even greater enthusiasm in this reform. Implementation was jeopardized not only because of resistance to change, but also because of the main players following divergent goals.

3.5 Principal-agent perspective

Principal-agent perspective was an appropriate approach, because practitioners (agents) were contracted by the principal (the MOH) to deliver some service (health services package) for the purpose of greater quality. In line with achievements of contracting services in high-income settings, particularly evidence from UK, the experience of FM in Iran endorsed the importance of evidence-based primary care as well as long-term mutual contracting on actors' motivation and quality of care that they deliver. However, contrary to the principles of the principal-agent perspective, the nature of contracts and the relationship between the MOH (principal) and practitioners (agent) was practically employer-employee in this implementation. In other words, as a result of principal's control of implementation, contracts which were designed to motivate staff acted as a powerful disincentive. In addition, principal-agent perspective proved useful to explain actors' lack of courage in implementing FM, because of big diversions from recommended and standard specifications of contracting. The same also applies to the auditing system. Diversions from the original perspective that were identified in implementing FM might indicate the importance of preparing society to adopt and tailor imported policies. Lack of

decentralization and the unique macro political system of Iran, hindered the relationship between principal and agent during implementation.

In addition, using principles of the purchaser-provider split uncovered how important it is to remove cultural barriers prior to division of labour in an autocratic regime, as well as considering the organizational past. The model which was defined to provide a platform for improving practice and delivering better services in high-income countries, became a platform to explain failures of implementing FM in Iran because of cultural and organizational barriers, plus individualism as a result of which inter-organizational cooperation was hard to achieve.

4 Contributions to the theoretical literature

Theoretical frameworks including the one in this thesis are useful to identify elements and relationships among elements that need to be considered for theory generation (Ostrom,2007). They do not, of themselves, explain or predict behaviour and outcomes (Schlager,2007). Some minor contributions to the theoretical literature emerge from this thesis.

First, the thesis has suggested a new perspective of inter-relationships that exist in implementation of policy, what I have called a dynamic model of health policy analysis (Chapter 5). The model emphasizes the complex reality of implementation. It points to the dynamic interrelation and interdependence of policies and their environments.

Second, taking actors' hierarchy into consideration when analysing policy implementation, tends to challenge Walt and Gilson health policy triangle (1994). They developed a policy analysis framework specifically for health, although its relevance extends beyond this sector. Their framework has influenced health policy research in a diverse array of countries, and has been used to analyse a large number of health issues (Gilson & Raphaely,2007). They noted that health policy research focused largely on the content of policy, neglecting actors, context and processes. Their policy triangle framework is grounded in a political economy perspective, and considers how all four of these elements interact to shape policy-making. In contrast to the dynamic model, proposed in this thesis, Walt & Gilson model adopts a linear and more sequential and mechanical order. In addition, no clear distinction is mentioned between two sets of actors in their model, the crucial notion which was identified as a major barrier to implementing FM in Iran.

Third, the thesis developed categories of facilitators of and obstacles to implementation of reform in the health sector (Chapter 3). The list not only contributed to the data analysis in this study but also might be used in other studies which seek similar objectives. Besides, the thesis added six factors to the list of obstacles: unrealistic policy; concurrent implementation with a contrasting policy; lack of local understanding; unclear health governance; inter-sectoral hostility; and undermining meritocracy.

Fourth, the thesis successfully used the modified four-fold framework (originally introduced by Harrison, 2004) for the first time in the context of a middle income country. It expanded the framework by incorporating more theoretical approaches including network theories as well as principal-agent perspectives. The expansion of the original framework contributed to portraying a more comprehensive picture of implementation, without which some crucial aspects such as political structure and decentralization might have been overlooked. A few minor theoretical contributions to some components of the framework emerged:

- First, employing some aspects of the ACF was a heuristic approach in an opposite setting to the context where the ACF was derived (USA). It expanded applicability of the theory to the health sector and its capability to explain the implementation of change in the centralized setting of Iran. The Iranian experience indicates the applicability of the ACF to explain stability better than change. Contrary to what the ACF predicts, the findings suggest that short-term and mainly political interests of actors can be important in explaining major policy change. Politicians may sell out core beliefs in order to escape temporary strategic problems and to safeguard short-term political interests.
- Second, there is a debate among policy experts as to whether the concept of networks is merely descriptive, or whether it has explanatory value, whether it is largely a Western concept, developed by looking at policy-making in the US and UK, and whether it has legitimacy for developing countries (Thatcher, 1998). For some the network approach is not really a new analytical perspective, but signals rather a change in the policy environment and the political system. There are only a few empirical studies in health in developing countries which use network analysis as a lens (Tantivess & Walt, 2008; Schneider, 2006). Despite partial existence of its components, network notions were applicable in the context of Iran. It

revealed harms to implementation of FM as a result of imbalance between the two groups of networks, which is novel in such a context.

- Third, looking for coalitions to explain groups of effective individuals to advocate the dominant policy, the context of Iran proved to accommodate policy subsystems, or more accurately prominent policy subsystem within the boundary of a more pushing frontline organization. This might reflect lack of established structures such as NGOs as well as weak cooperation and teamwork, plus opaque policies and governance because of which coalitions fail to form. Therefore, the thesis suggests limited policy subsystems in this context, which seemed to be fitted to requirements of the ACF in explaining change.

Fifth, only a few health policy analyses on low and middle income countries have explicitly discussed research design (Walt et al,2008). The thesis would have benefited the field because of more reflection on the range of approaches that could be used, plus their relative benefits. More clearly, it was for the first time in Iran that stakeholders from all engaged levels were included in investigating implementation of change. Almost all studies, not only in Iran but also in most developing countries draw attention to national level stakeholders and mainly address their accounts. Moreover, there are not many studies in such settings and none in Iran, in which a fair collection of qualitative methods have been used. This thesis might have contributed to promoting qualitative research in addressing complex health initiatives in Iran and beyond.

5 Rigour of the study

Remaining receptive to different theoretical approaches enabled me to map out the social and historical context of how policy unfolded over time in order to understand its implementation. However, longer-term analysis is necessary to reconstruct the implementation trajectory. There are several criteria to judge the quality of qualitative research, either from a constructivist perspective or within a positivist paradigm (Spencer et al,2003). Although Lincoln and Guba (1985) reject scientific criteria that appraise validity, generalisability, reliability, and objectivity for qualitative studies, proposing instead a set of naturalistic criteria defined as credibility, transferability, dependability, and conformability for interpretive research, I use some scientific criteria to address the rigour of this study. All approaches share basic principles: reducing the biases and accounting for the predispositions of researchers as well as data sources (Morse et al,2002;Patton,2002).

5.1 Limitations

Policy evaluation requires a longer timeframe than political exigencies often allow. Sabatier (2007) suggests that 'a decade or more' is the minimum duration of most policy cycles, from emergence of the problem through sufficient experience with implementation to render a 'reasonably fair evaluation' of impact. A long span of study of the policy process may well be needed to identify unintended and unexpected consequences of policy. Longer-term analysis or 'backward working' from a trigger statistic or social phenomenon may be necessary to reconstruct a policy implementation pathway. Given the timescale of this thesis, embedding such an aspect is contested.

Most data in this thesis were obtained using semi-structured interviews, which despite several advantages have some limitations. All I had access to was what people said. Although I employed several methods to enhance validity and credibility of the data, there is no definite way to understand why people say something. I tried to contextually analyze the data, however I cannot be certain of respondents' underlying rationalizations, whether it was to impress me, show off, and promote a particular view or undermine their rivals. This was why I used other sources of data to enhance the validity of findings. Although I adopted multiple methods to enhance rigour, I could not simply combine data in order to arrive at an overall truth (Silverman, 1998; Armstrong et al, 1997). I adopted an interpretive approach in data analysis based on selected theories, rather than a positivist approach. Further, the fact that different analysts relying on different models produce different explanations suggests the need for introspection (Allison, 1969). I acknowledge that the data might be differently interpreted by using other frameworks for analysis. In addition, the research on the public's view on implementation was limited for practical reasons (see Chapter 5 for more details). Views were limited to those of public representatives.

I chose simplicity, rather than an illusory search for the full picture. Although the four-fold framework was useful for unfolding implementation, the choice of particular theories implies an inherent bias. The thesis points to areas with potential for further exploration to identify more precisely the causal mechanisms driving policy change in Iran (John, 2003). Finally, although I revised, abandoned or addressed the limitations of my selected theories, I cannot claim I have been completely objective in this study.

5.2 Validity & reliability

I adopted Mays and Pope's (1999) suggestion of triangulation to enhance the validity and reliability of findings. Triangulation is the most frequently cited technique for counteracting threats to the plausibility of natural field research (Burgess,1984; Delamont, 1992; Denzin,1970). However, it is controversial as a genuine test of validity. Rather it is a means of ensuring the comprehensiveness of a set of findings. Denzin (1970) identifies triangulation of data, methodology, theory, and researcher. The first three were applied in this study. Hammersley and Atkinson (1983) explain that data triangulation 'involves the comparison of data relating to the same phenomenon but deriving from different phases of the fieldwork, accounts of different participants, and different points in the temporal cycles occurring in the setting (p.197). Silverman (1993) argues that this use of triangulation is contested because data from different sources can only be used to identify the context specific nature of differing accounts and behaviour. He points out that discrepancies between different data sources (such as from doctors and their patients) present a problem of adjudication between rival accounts. These methods of triangulation will enhance in-depth understanding of findings but the extent to which the validity increases remains doubtful (Denzin,1989). Thus, triangulation is seen as a way of making a study more comprehensive or of encouraging a more reflexive analysis of the data than as a pure test of validity (Pope et al,2000).

The thesis involved data collection over time, in different places, and from people at different levels including high and middle-ranking national policy makers, provincial officials, local practitioners and public representatives. I also divided the field study into two phases that opened avenues for comparison and focus in the second phase. By triangulating data, I was able to compare and contrast between phenomena from diverse sources. I also employed different methods for collecting the data, which increased its credibility. It is recommended that multiple methods are followed to test a situation or phenomena, to balance the flaws of one method with the strengths of another. Indeed, combining methods brought the best of each, which helped to overcome their unique deficiencies (Denzin,1970).

Another suggestion to enhance rigour is to have a priori hypotheses. However, well-defined hypotheses might suggest that other methods could have been more appropriate. A few research questions were shaped and refined during the research, while the design was adapted as the study proceeded. A second remedy is designing explicit analytical

constructs (equal to codes) prior to analysis (Milles & Huberman, 1994). Again these restrictive approaches might cause the researcher to overlook important emerging themes from the data. Therefore, in addition to the framework approach, an inductive approach was also developed for the analysis.

I embedded some verification mechanisms to systematically and constantly monitor the fit of data to the analytical framework by reading, rereading, and constant consultation with main data extracts (Morse et al, 2002). Frequent changes to the theme table and categories of themes and sub-themes were made to modify analysis and improve credibility of the findings.

Some suggest using more than one analyst to improve consistency or reliability and minimize the researcher's bias (Perry, 1994; Daly et al, 1992; Waitzkin, 1991). This was not possible in this study. To enhance the reliability, I took the samples purposefully, recorded the interviews, had them accurately transcribed, wrote up field notes as soon as possible, systematically coded the data, asked some more experienced qualitative researchers to verify my coding in some data sections, and was transparent in data analysis (Kirk & Miller, 1985).

A long-established method for reducing error in qualitative studies is to search for and discuss elements in the data that contradict, or appear to contradict the emerging explanation of the phenomena under study. In order to increase sophistication and credibility, I considered deviant cases and attempted to explain the majority of the cases under scrutiny.

I also held two sessions with a few national level respondents and a session with provincial respondents, in which I asked them to validate their accounts and clarify some complicated points (Silverman, 1998). This helped me to check my interpretation of the data and compare my account with theirs. It improved the level of agreement between us and reduced investigator's errors. In addition, the meetings generated further original data which resulted in changes in the thematic analysis.

5.3 Generalisability

The issue of generalising from qualitative research has been much discussed (Mitchel, 1983; Schofield, 1993; Hammersley, 2000; Seale, 1999; Williams, 2000). One of my main

objectives was understanding the processes of policy. Given the lack of understanding in this area in general, findings might not be generalizable per se, but still are helpful for other settings and scenarios. Besides, this research was concerned with depth and contextual understanding of a specific policy in Iran. Therefore, generalisability was not an appropriate aim. Instead of statistical, it tends to address conceptual generalisability. In research such as this where the 'total population' was impossible to ascertain, it is acceptable that samples do not statistically represent a population (Schofield, 1993). Generalisation beyond the sample can be made based on '*the essential linkage between two or more characteristics in terms of some systematic explanatory schema*' (Murphy et al, 1998). I took into account the wider social, historical and contextual factors in interpreting the findings. Nevertheless, generalizing the findings beyond its setting relies upon future empirical justification (Seale, 1999).

6 Policy implications and future research

This thesis provides an opportunity to consider the challenges that lie ahead and identify ways in Iran to narrow the identified gaps between aspiration and implementation. Concurrent implementation of FM with Behbar was an attempt to provide a universal coverage and people-centred services. However, a lot must be done in Iran as regards public policy and leadership, without which sustained improvement is hard to obtain.

This thesis has provided some evidence of how to improve policy implementation. Recommendations are based on the reality of the Iranian context and the findings of the thesis. They follow the notion of the dynamic model of health policy analysis (Figure 5.1) and will be addressed in conjunction with areas in need of further investigation.

6.1 Aspects of the policy (content)

(A). Autocratic policy making impeded implementation of FM. It is too late to reverse this process, however the continuation of such an approach still causes harm by making influential stakeholders reluctant or even opponents of the policy. Disproportionate reliance on command and control could be replaced by the inclusive, participatory, negotiation-based leadership indicated by the complexity of the contemporary health system. Listening to the public is at the core of this task. Achieving it requires trade-offs that might start by taking into account citizens' "expectations about health and healthcare" and ensuring "that [their] voice and choice decisively influence the way in which health services are designed

and operate” (WHO,2008). A careful and comprehensive stakeholder analysis that identifies losers and winners of the policy will help. Such an analysis needs to be carried out by independent academics.

(B). Population health can be improved through policies that are controlled by sectors other than health (WHO,2008). As was overwhelmingly requested, representatives of different stakeholders must be involved in revising FM. In order to bring about such reforms in the complex environment of the health sector, it will be necessary to reinvest in public leadership in a way that pursues collaborative models of policy dialogue with multiple stakeholders – because this is what people expect, and because this is what works best. This requires trade-offs and negotiation with multiple stakeholders that implies a departure from the linear, top-down models of the past towards becoming learning organizations. Policies like FM today are not primarily defined by the component elements they address but by the social dynamics that define the role of health systems in society. The GPA, the IMA, the MPO, mayoral and city delegates, media and journalists, representatives of different practitioners at various levels, ministries other than the MOH and MWSS such as internal affairs, labour, cooperation, and transport, must be engaged. This might not happen unless health is declared at the highest political levels, as a task beyond the boundaries of the MOH. Parliament must see it as a national challenge which needs collaboration among social, economic, cultural, political, and health sectors.

In addition, it must be investigated whether privatization and decentralization would reduce or increase bureaucratic barriers to implementation of FM. Given the diversity of Iranian society and big intra and inter-provincial differences; prominent partialism; ethnic preference; the fragile NGOs and CSOs; and the prolonged shadow of autocracy in the country, further research is required to address decentralization, the sequence of activities to do so, the categories of services to be privatized and the appropriate methods to evaluate such a process. More importantly, the country needs to improve health information systems to acquire critical data for decentralized decision-making (Tavassoli,2008).

6.2 Policy environment (context)

(A). Lack of clear governance of health is a major challenge for the MOH and the other institutions, governmental and non-governmental, that provide health leadership. The system needs to adapt and tailor a selected form governance for health system in Iran.

Given poor collaboration in the country, as well as the degree to which the revolutionary and ideological approach undermines meritocracy, conducting such a task might be difficult.

(B). Existing PHC networks are the only available host in rural areas to accommodate the current pattern of implementation of FM. The MOH could pay more to the private doctors in those areas to provide services, instead of expanding the governmental provision. Because most private doctors have several years of experience, this is also consistent with the abandoned article of the policy to pay incentive for every single year of experience. This promotes the policy and makes the private practitioners loyal to the principles of FM, which is good in the long-run for the entire health system. In addition, a comparison between the few private doctors who practice as FD in Golestan and the majority of public doctors might provide more sufficient evidence for this.

The MOH's direction is towards expansion rather than contracting services with the private sector. Experienced and established local doctors who are highly trusted by the public, must be employed even if at a higher cost. Further research is needed to investigate how the system could maintain private practitioners in deprived areas, and how the private sector could be approached to invest in preventive primary care.

(C). Financial aspects of the health system must be defined and formulated in general, and particularly for FM. Unsustainable funding has already created serious doubts regarding the stability and future of implementation. The insurance system must be substantially revised. The MWSS should be granted the full authority to integrate numerous insurance schemes and create a national insurance database. To do so, the political barriers and efforts for maintaining parallel insurance schemes must be removed. This is not likely unless all citizens are assured that minimal basic services at certain cost is provided for them in all parts of the country, enjoying the integrated national insurance system.

Given the diverse financial sources and the nature of insurance organizations, a possible way that fulfils practical integration in a short time period would be to grant the MWSS the authority to unify the insurance policy making, and virtually integrate the financial pooling for health. Otherwise, the current nature of Behbar, which is insurance in name but support in reality, becomes the Achilles' heel of implementation. There are several ways to integrate the pooling and secure the finance such as pay rolls and social insurance. Given the different payment mechanisms involved, high degree of politics to allocate the budget,

and lack of trust that is embedded across different actors and organizations, fulfilling such methods in the short-term looks like a luxury that can hardly be afforded. More research is needed to evaluate the possibility of such insurance reform, which remains a major policy issue in Iran.

(D). FM is not yet a priority in Iran. It is not considered a cornerstone for development, despite the overwhelming verbal support. Yet, treatment and highly specialized care is supported a lot. For long, a small group of influential people with substantial interest and benefit in the private sector, most of them medical specialists, has been simultaneously making decisions for the public sector. They also control the media which is run by the government. Further, professional trade unions including the IMA have a low-profile in decision making. Advocates of FM must be established to promote it as a grass root requirement not a vague goal to decorate the shop window.

6.3 Management of implementation (process)

(A). Despite some serious criticisms, this thesis does not provide sufficient evidence to advise whether the purchaser-provider split is helpful or not for implementation of FM. Besides, unless a clear and integrated funding mechanism is defined, there is no alternative way of financing implementation. The fundamental question is that should FM continue to be sacrificed for Behbar at the price of enjoying the financial opportunity? Or alternatively, and for the sake of FM, Behbar could be limited to covering deprived areas and improve access to health services for the poor. This could allow FM to remain as a prosperous and tested way to remedy the muddled health system in Iran. This would maintain the public hope of implementing FM. Further research is needed to determine the necessary requirements to do this. However, given the adverse effects of the current implementation on both public and practitioners, as well as the high faith in the concept of FM as the only prescription for reengineering the whole health system in Iran, making such a distinction seems to be essential.

(B). It is essential that people who designed the policy and started to put it into practice, be officially invited to re-join the reform. The MOH in particular and other organizations must put their political differences aside and enjoy all potentials. A think tank needs to be established within the MOH consisting of policy makers; practitioners including doctors, nurses, midwives, etc as well as their professional associations like IMA and GMC; journalists and academics. The MOH needs more scientists to evaluate the system and

contribute to the reform. Lack of expertise is an apparent deficiency. To enjoy a less biased approach to the reform and in order to obtain a clear picture of implementation, it is worth that an independent evaluator investigates the implementation for the implementers, legislators, and the entire government. Such reports might open the eyes of insiders and persuade them to correct the wrong activities with more courage and less suspicion in the authenticity of reports.

(C). Lack of sufficient explanation for the public and for practitioners has harmed implementation of FM. A short-term solution would be that parliament allocates a certain percentage of the annual budget for education. Further, parliament must ask third party researchers to audit the implementers' performance in training, and apply its results in the next year's budget allocation. A committee for education and training could be established by both MOH & MIO, consisting of professionals whose task is to decide on information for the public and practitioners. This committee should act as a steering group in a full-time capacity. Materials, methods of training and the approach need further investigation. The mid-term remedy is to reform medical education in Iran to joint it more with community practice. This can bring some evidence about the necessities of training medical students, who are capable to practice in the community and are armed with essential managerial and social skills.

(D). Training administrative staff, practitioners and the public will improve implementation of FM. Although such an opportunity was missed, the mass media, particularly the national TV (IRIB) could be used to inform the public. Instead of broadcasting specialist-oriented programmes on TV, the direction must focus on public health challenges. This will be extremely difficult, given powerful opponents and their influence. If the public understand how important FM is in taking care of their long-term health, they may demand the policy themselves. This stage would be the real momentum of converting FM from a supply notion to a demand, which would secure its future.

(E). The tariff system and auditing mechanisms should be revised and improved. Unless a method which relies on people contributing towards their health costs is introduced, the current low level of fees will neither improve equity nor enhance quality. Instead it encourages practitioners to quit the programme. Effective auditing needs contracting out to professional third parties to conduct, while they train the MOH's personnel to gradually take over the job. This approach tackles the conflict of interest in the current auditing

process. Because a third party auditor would avoid a ceremonial approach, it might also encourage practitioners to improve record keeping.

7 Epilogue

Successful implementation of FM requires inclusive leadership that engages with a variety of stakeholders beyond the boundaries of the public sector, from clinicians to lay people, and from politicians to academics. The former minister of health who initiated FM along with another former influential minister of health, both of whom are currently members of parliament, can create a strong coalition of pro-FM MPs to advocate the policy and lead reform. They can invite the media to run a widespread campaign for radical change in the health system including: financial integration, increasing the proportion of GDP per capita spent on health, promote decentralization, and encourage prevention. The coalition can integrate the evidence and unify stakeholders to change the status quo for the public good.

References

- Allison, G. (1969) 'Conceptual Models and the Cuban Missile Crisis', *American Political Science Review*, 63(3): 689-718.
- Anderson, GF., Hurst, J., Hussey, PS., & Jee-Hughes, M. (2000). 'Health Spending and Outcomes: Trends in OECD Countries, 1960- 1998'. *Health Affairs*, (19): 150-7.
- Antonsen, M., Greve, C. & Jørgensen, T. B. (2000). 'Teorier om forandring i den offentlige sektor', in Antonsen, M. & Jørgensen, T. B., eds., *Forandring i teori og praksis. Skiftende billeder fra den offentlige sektor*. Copenhagen: DJØF.
- Armstrong, D. Gosling, A. Weinman, J. Marteau, T. (1997) 'The Place of Inter-Rater Reliability in Qualitative Research: An Empirical Study', *Sociology*, 31: 597- 606.
- Atkinson, S. (1999) 'From Vision to Reality: Implementing Health Reforms in Lusaka, Zambia', *Journal of International Development*, 9 (4): 631- 639.
- Barbour, R.S. (2001). 'Checklists for improving rigour in qualitative research: a case of the tail wagging the dog?' *BMJ*, 322: 1115-1117.
- Bardach, E. (1977) '*The Implementation Game: What Happens after a Bill Becomes a Law?*', Cambridge, Mass: MIT Press.
- Barrett, S.M. and Fudge, C. (1981) 'Examining the policy-action relationship', in Barrett, S.M. and C. Fudge (eds), *Policy and Action: Essays on the Implementation of Public Policy*. London: Methuen.
- Baumgartner, FR., & Jones, BD. (1991). 'Agenda Dynamics and Policy Subsystems'. *Journal of Politics*, 53 (4):1044-74.
- Baumgartner, FR., & Jones, BD. (1993). '*Agenda and Instability in American Politics*'. Chicago: The University of Chicago press.
- Becker, H.S. (1971) '*Sociological Work*', London: Allen Lane. *Review of the Evidence*'. London: King's Fund.
- Bennett, T., (1999) 'Reproductive health in South Africa', *Public Health Reports*, 114: 88-90.
- Bergen, A. While, A. (2005) "Implementation Deficit' and 'Street-level Bureaucracy': Policy, Practice and Change in the Development of Community Nursing Issues', *Health and Social Care in the Community*, 13 (1): 1- 10.
- Berridge, V. (1999). 'Passive Smoking and its Pre-history in Britain: Policy Speaks to Science?', *Social Science & Medicine*, 49: 1183-95.
- Bertranou, F.M., (1999) 'Are Market-oriented Insurance Reforms Possible in Latin America? The Cases of Argentina, Chile, and Colombia'. *Health Policy*, 47: 19- 36.
- Bevir, M., & Rhodes, RAW. (2003). '*Interpreting British Governance*', London: Routledge.

- Bindman, AB., & Majeed, A. (2003). 'Organization of Primary Care in the United States'. *BMJ*, 326: 631- 4.
- Black, N. (1988). 'Beating the Offside Trap: Developing a Regional Approach to Clinical Audit'. *Journal of Management in Medicine*, 4 (1): 38-42.
- Black, N. (1994). 'Why We Need Qualitative Research'. *Journal of Epidemiology and Community Health*, 48: 425-426.
- Blaikie , N. (2000). '*Designing Social Research*'. Cambridge: Policy Press.
- Blaxter, M. (2000) 'Criteria for Qualitative Research', *Medical Sociology News*, 26: 34- 37.
- Bobrow, DB., & Dryzek, JS. (1987). '*Policy Analysis by Design*'. Pittsburgh, PA: University of Pittsburgh Press.
- Bodenheimer, T. (2003). 'Innovations in Primary Care in United States'. *BMJ*, 326: 796-9.
- Bowling, A. (1997). '*Research Methods in Health: Investigating Health and Health Services*'. Buckingham: Open University Press.
- Bossert, T. (1998). 'Analyzing the Decentralization of Health systems in Developing Countries: Decision Space, Innovation and Performance'. *Social Science and Medicine*, 47(10): 1513-1527.
- Bossert, TJ., & Beauvais JC. (2002). ' Decentralization of Health Systems in Ghana, Zambia, Uganda and the Philippines: A Comparative Analysis of Decision Space'. *Health Policy and Planning*, 17(1):14-31.
- Bossert, T., Bona Chita, M., & Bowser, D. (2003) 'Decentralization in Zambia: Resource Allocation and District Performance'. *Health Policy & Planning*, 357- 69.
- Bressers, HTA., & O'Toole, LJ. (1998). 'The Selection of Policy Instruments: A Network Based Perspective'. *Journal of Public Policy*, 18 (3): 213-239.
- Britten, N. (1995). 'Qualitative interviews in medical research'. *BMJ*: 311, 251-253.
- Britten, N. (1999). '*Using case studies in Health Services and Policy Research*', in Mays, N. & Pope, C. (1997). '*Qualitative Research in Health Care*'. 1st ed. London: BMJ Publication Group.
- Budget and Planning Organization, (1999) 'The First National Report of Human Development in Islamic Republic of Iran', Tehran: Iran.
- Bunggaard, U., & Vrangbaek, K. (2007). 'Reform by Coincidence? Explaining the Policy Process of Structural Reform in Denmark', *Scandinavian Political Studies*, Vol 30 (4): 491-520.
- Burgess, R.G. (1984). '*In the Field: An Introduction to Field research*'. London: Routledge.
- Buse, K. (2008). 'Addressing the Theoretical, Practical and Ethical Challenges Inherent in Prospective Health Policy Analysis'. *Health Policy and Planning*. 23: 351- 60; doi:10.1093/heapol/czn026.

Buse, K., Mays, N., Walt, G., (2005) '*Making Health Policy*': 1st edn, London: Open University Press.

Cairney, P. (2007). 'A "Multiple Lenses" Approach to Policy Change: The Case of Tobacco Policy in the UK', *British Politics*, 2, 45-68. doi:10.1057/palgrave.bp.4200039

Campbell, J.L. (2004). '*Institutional Change and Globalization*'. Princeton, NJ: Princeton University Press.

Campbell, J.L. (2007). 'Provision of Primary Care in Different Countries'. *BMJ*, 334:1230- 1.

Cauthen, N. & Amenta, E. (1996). 'Not for Widows Only: Institutional Politics and the Formative Years of Aid to Dependent Children', *American Sociological Review*, 61; 427-48.

CDC (Centre of Diseases Control), MOHME (Ministry of Health and Medical Education), (2003) '*Non-communicable Diseases Programme*', (IR. Iran), Brief report of 2003, Ministry of Health and Medical Education, Tehran: Iran.

Centre for Management of Diseases, (2004), 'Information About Diseases and a Report about Communicable Diseases', Tehran: Iran.

Centre of Health Promotion and Network Expansion, (2001), '*Annual Reports of Vital Censuses in health Houses*', Tehran: Iran.

Centre of Health Promotion and Network Expansion, (2006), '*Annual Reports of Vital Censuses in health Houses*', Tehran: Iran.

Cheraghali, AM., Nikfar, S., Behmanesh, Y., Rahimi, V., Habibipour, F., Tirdad, T., Asadi, A. and , Bahrami A. (2008). '*Access to Medicine In Iran*', A presentation for the 2nd ICIUM at the Department of Food and Drugs, Ministry of Health, Tehran- Iran. mednet3.who.int/icium/icium2004/resources/ppt/AC014.ppt.

Coast, J. (2001). 'Citizens, Their Agents and Health Care Rationing: An Exploratory Study Using Qualitative Methods'. *Health Economics*, 10(2): 159-174.

Cohen, MD., Marsh, JG., & Olsen, JP. (1972). 'A Garbage Can Model of Organizational Choice', *Administrative Science Quarterly*, 17: 1-25.

Comaroff, J.(1976). 'A Bitter Pill to Swallow: Placebo Therapy in General Practice'. *Social Rev*, 24: 79-96.

Considine, M. (2005). '*Making Public Policy*'. Cambridge: Polity Press.

Cooper, H. M. & Hedges, L. V. (1994) 'The Handbook of Research Synthesis', N.Y. : Russel Sage Foundation.

Coreil, J. (1995). 'Group interview methods in community health research'. *Med Anthropol*.16(3):193-210.

Couper, ID. (2004). 'Medicine in Iran: A Brief Overview'. *SA Fam Pract*; 46 (5). www.safpj.co.za/index.php/safpj/article/viewFile/70/70.

- Crombie, I.K & Davies, H.T.O. (1998) 'Beyond Health Outcomes: The Advantages of Measuring Process', *Journal of Evaluation in Clinical Practice*, 4 (1): 31- 38.
- Crotty, M., (1998) '*The Foundation of Social Research*'. Sage Publications, Thousand Oaks, CA.
- Curry, S.J. (2000) 'Organizational Interventions to Encourage guideline Implementation', *Chest*, 118, 40S- 46S.
- Daly, J. McDonald, I. Willis, E. (1992) 'Why You Don't Ask Them? A Qualitative Research Framework for Investigating the Diagnosis Cardiac Normality, in: Daly, J.
- Danishevski, K. balabanova, D. McKee, M. Atkinson, S. (2006) 'The Fragmentary federation: Experiences with the Decentralized Health System in Russia', *Health Policy and Planning*, 21 (3): 183- 194; doi: 10.1093/heapol/cz1002.
- Davies, H.T.O. Nutley, S.M. Smith, R. (1995) 'What Works? The Role of Evidence in Public Sector Organizations', *Public Money and Management*, 19 (1): 3- 5.
- Davis, K., Schoen, C., Schoenbaum, SC., Audet, AJ., Doty, MM., Holmgren, AL, et al. (2006). '*Mirror, Mirror on the Wall: An Update of the Quality of American Healthcare Through the Patient's lens*'. New York: Commonwealth Fund.
www.cmwf.org/usr_doc/Davis_mirrormirror_915.pdf.
- Delamont, S. & Atkinson, P. (2001). 'Doctoring Uncertainty: Mastering Craft Knowledge'. *Social Studies of Science*, 31 (1): 87- 107.
- DeLeon, P. (1999) 'The stages approach to the policy process: What has it done? Where is it going?', in P.A. Sabatier (ed), *Theories of the policy process*. Boulder, Colo.: Westview Press.
- Denzin, N.K. (1970). '*The research Act: A Theoretical Introduction to Sociological Methods*'. Chicago: Aldine Publishing Co.
- Denzin, N.K. (1989) 'Strategies of Multiple Triangulation, in *Research Act: A Theoretical Introduction to Sociological Methods*', 3rd ed, Prentice Hall, Chap. 10.
- Denzin, N.K. & Lincoln, Y.S. (1998). '*The Landscape of Qualitative Research: Theories and Issues*'. London: Sage.
- Denzin, N.K. (2009). 'The Elephant in the Living Room: or Extending the Conversation about the Politics of Evidence'. *Qualitative Research*, 9 (2) 139-160. Doi: 10.1177/1468794108098034.
- Deputy of Coordination, Ministry of Health & Medical Education (MOHME), '2005' 'The 4th "5-Year Comprehensive Progress Programme of the Islamic Republic of Iran; *National Legislation of Progress in Health Sector*', Tehran: Iran.
- Devlin, N., Maynard, A., Mays, N., (2001) 'New Zealand's New Health Sector Reforms: Back to the Future?', *British Medical Journal*, 322: 1171- 1174.
- Dingwall, R.E., Murphy, P., Watson, E. (1998). 'Catching Goldfish: Quality n Qualitative Research'. *Journal of Health Services Research and Policy*, 3: 167-72.

- Djan, J.O., Kyei-Faried, S., Twum, S., Danguah, J.B.O., Ofori, M., Browne, E.N.L., (1997) 'Upgrading Obstetric Care at the Health Centre Level, Juaben, Ghana'. *International Journal of Gynecology and Obstetrics*, 59 (suppl): S83- 90.
- Dolowitz, D., & Marsh, D. (1996). 'Who Learns from Whom: A review of the Policy Transfer Literature'. *Political Studies*, XLIV: 343- 57.
- Dopson, S. Locock, L. Gabby, J. Ferlie, E. Fitzgerald, L. (2003) 'Evidence-Based Medicine and Implementation Gap', *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 7 (3): 311- 330.
- Doran, T., Fullwood, C., & Reeves, D. (2008) 'The Effect of Financial Incentives on Inequalities in the Quality of Primary Care', *J Epidemiol Community Health*, 62 (Suppl 1): A21 & Oral Presentation in the 52nd Annual Scientific Meeting of Society of Social Medicine, 17-19 September 2008, University of Southampton.
- Drummond, M. (1995) 'The United kingdom National Health Services Reforms: Where Are We Now?'. *Australian Health Review*, 18: 28-42.
- Dudley, G., & Richardson, J. (1996). 'Why Does policy Change Over Time? Adversarial Policy Communities, Alternative Policy Arenas, and British Trunk Roads Policy, 1945- 95', *Journal of European Public Policy*, 3 (March): 63- 83.
- Dudley, RA., Johansen, KL., Brand, R., Rennie, DJ., & Milstein, A. (2000). 'Selective Referral to High-Volume Hospitals: Estimating Potentially Avoidable Deaths'. *JAMA*, 283: 1159- 66.
- Dye, T. (2001), '*Top down policy making*', London: Chatham House Publishers.
- Eberg, J. (1997). 'Waste Policy and Learning'. PhD thesis, Department of Political Science, University of Amsterdam.
- Elmore, R. E. (1978) 'Organizational models of Programme Implementation', *Public Policy*, 26: 185- 228.
- Elmore, R.F. (1981) 'Backward Mapping and Youth Employment', unpublished paper prepared for the third meeting of the International Working Group on Policy Implementation.
- Epsing-Anderson, G. (1994). 'Welfare States and the Economy', in N. Smelser & Richard Swedberg (eds) *Handbook of Economic Sociology*, Princeton: Princeton University Press. Pp. 711-725.
- Ericson, R., Baranek, P. and Chan, J. (1991). '*Representing Order: Crime, Law and Justice in the News Media*'. Milton Keynes: Open University Press.
- Exworthy, M. (2007) 'Policy to Tackle the Social Determinants of Health: Using Conceptual Frameworks to Understand the Policy Process'. Paper presented to a Workshop on Health Policy Analysis, London, UK, 21-22 May 2007.
- Feldman, MS. (1989). '*Order Without Design: Information Production and Policy Making*'. Stanford: Stanford University Press.

- Feldman, MS. & March, JG. (1981). 'Information as Signal and Symbol', *Administrative Science Quarterly*, 26: 171- 86.
- Fenger, HJM., & Klok, PJ. (1998). 'Interdependency, Beliefs, and Coalition Behaviour: A Contribution to Advocacy Coalition Framework', unpublished paper by courtesy of Prof. Sabatier.
- Ferlie, E. (1997) 'large-Scale Organizational and Managerial Change in Health Care: A Review of the Literature', *Journal of Health Services Research and Policy*, 2 (3): 180- 189.
- Ferrer, RI., Hambridge, SJ., & Maly, RC. (2005). 'The Essential Role of Generalists in Health Care Systems'. *Ann Intern Med*, 142: 691- 9.
- Firth-Cozen, J., (1997) 'Health Promotion: Changing Behaviour Towards Evidence-based Care', *Quality in Health Care*, 6: 205- 211.
- Fischer, F. (2003). '*Reframing Public Policy: Discursive Politics and Deliberate Practices*'. Oxford: Oxford University Press.
- Fitzgerald, L., Lane, E., Hawkins, C., (2003) 'Innovation in Healthcare: How Does Credible Evidence Influence Professionals?', *Health and Social Care in the Community*, 11 (3): 219- 228.
- Fonn, S., Xaba, M., Tint, K.S., Conco, D., Varkey, S., (1998) 'Reproductive Health Services in South Africa: From Rhetoric to Implementation', *Reproductive Health Matters*, 6: 22- 32.
- Forrest, CB. (2003). 'Primary Care in the United States: Primary Care Gate-keeping and Referrals: Effective Filter or failed Experiment?'. *BMJ*, 326: 692- 5.
- Fox, A. (1974) '*Beyond Contract: Work, Power and Trust Relations*'. London: Faber.
- Fox, D., P. Day, and R. Klein. (1989). The power of professionalism: policies for AIDS in Britain, Sweden and the United States. *Daedalus*, 118 (2): 93–112.
- Fulop, N. Allen, P. Clarke, A. Black, N. (2001) '*Studying the Organisation and Delivery of Health Services, Research Methods*', London and New York: Routledge.
- Garrett, G., and Weingast, B. R. (1993) '*Ideas, Interests, and Institutions: Constructing the European Community's Internal Market*'. Cornell University Press, Ithaca, NY.
- Giacomini, M.K., & Cook, D.J. (2000). 'Users' Guides to Medical Literature: XXIII. Qualitative Research in Health Care. Are the Results of the Study Valid? Evidence-based Medicine Working Group'. *Journal of American Medical Association*. 284 (3): 357-62.
- Giddens, A. (1984). '*The Constitution of Society: Outline of the theory of Structuration*', Cambridge: Polity.
- Gill, Z., Ahmed, J. U., (2004) 'Experience from Bangladesh: Implementing emergency Obstetric Care as Part of the Reproductive Health Agenda', *International Journal of Gynaecology and Obstetrics*, 85: 213- 220.

- Gilson L., & Raphaely N. (2007). 'The terrain of health policy analysis in low and middle income countries: a review of the literature 1994–2005'. Paper presented to a Workshop on Health Policy Analysis, London, 21–22 May 2007.
- Glaser, B.G. & Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*, London: Weidenfeld & Nicolson.
- Goggin, M.L., Bowman, A.O'm., Lester, J.P. and O'Toole, L.J.' Jr (1990) 'Implementation theory and practice; Toward a third generation', Glenview Ill.: Scott Foresman/Little, Brown and Company.
- Gray, J.A.M. (1997) *'Evidence-based HealthCare: How to Make Health Policy and Management Decisions'*, Churchill Livingstone, New York.
- Green, J. (1998) 'Commentary: Grounded Theory and the Constant Comparative Method', *BMJ*, 316: 1064- 5.
- Green, J. & Browne, J. (2005). *'Principles of Social research'*, Maidenhead: Open University Press.
- Griffiths, C., Kaur, G., Gantley, M., Feder, G., Hillier, S., Goddard, J., and Packe, G. (2001). 'Influences on Hospital Admission for Asthma in South Asian and White Adults: Qualitative Interview Study'. *BMJ*, 323: 962-966.
- Grindle, M. and Thomas, J. W. (1991) *'Public Choices and Policy Change: The Political Economy of Reform in Developing Countries'*, Baltimore: John Hopkins University Press.
- Grol, R., (1997) 'Beliefs and Evidence in Changing Clinical Practice', *BMJ*, 315, 418- 421.
- Hajer, M., & Wagenaar, H. (2003). 'Introduction. In *Deliberative Policy Analysis*, edited by Hajer and Wagenaar. Cambridge: Cambridge University Press.
- Hammersley, M. (1992). *'What's Wrong with Ethnography?'*. London: Routledge.
- Hammersley, M. (2000). 'Varieties of Social Research: A Typology'. *Int Journal of Soc Res Metodology*, 3, 3, 221- 9.
- Hammersley, M. & Atkinson, P. (1983). *'Ethnography: Principles in Practice'*. London: Routledge.
- Hansen, R., & King, D. (2001). 'Eugenic Ideas, Political Interests, and Policy Variance: Immigration and Sterilization Policy in Britain and the US', *World Politics*, 53 (2): 237- 63.
- Hargrove, E.C. (1975) *'The Missing Link: The Study of the Implementation of Social Policy'*. Washington, DC: Urban Institute.
- Harrison, A. (1976). *'Individuals and Groups'*, Monterey, CA: Brooks/Cole.
- Harrison, M. I. (2004) *'Implementing change in health systems, market reforms in the United Kingdom, Sweden & the Netherlands'*, London: SAGE Publications Ltd.

Harrison, A., Montgomery, E. T., Lurie, M., Wilkinson, D., (2000) 'Barriers to implementing South Africa's Termination of Pregnancy Act in Rural KwaZulu/Natal', *Health Policy and Planning*, 15 (4): 424- 431.

Harrison, S., Hunter, D.J., Marnoch, G., & Pollitt, C. (1989). 'General Management and Medical Autonomy in the National Health Service'. *Health Services Management Research*, 2(1): 38-46.

Hay, C. (2002). *'Political Analysis: A Critical Introduction'*, London: Palgrave.

Hayward, J. (1991). 'The Policy Community Approach to Industrial Policy'. In Dankwart, A., Rustow & Kenneth Paul Erikson, eds., *'Comparative Political Dynamics: Global Research Perspectives'*, pp. 381-407. New York: HarperCollins.

Heclo, H. (1974) *'Modern Social Politics in Britain and Sweden'*. New Haven: Yale University Press.

Higher Educational and Research Institute in Management and Planning, (2004) *'Proceedings of Seminar of Challenges and Development Vision in Iran'*, Tehran: Iran, P19- 26.

Hill, M. (1997a) *'The Policy Process in the Modern State'*. Harlow: Prentice Hall/Harvester Wheatsheaf.

Hill, M. (1997b) 'Implementation theory: Yesterday's issue?', *Policy and Politics*, 25 (4): 375-85.

Hill, M. & Hupe, P. (2002), 'Implementing public policy'. SAGE publications Ltd; London.UK.

Hjern, B, and Hull, C. (1982) 'Implementation Research as Empirical Constitutionalism', in B. Hjern and C. Hull (eds), *Implementation Beyond Hierarchy*. Amsterdam: Elsevier (special issue of European Journal of Political Research). p. 105- 15.

Hjern, B. and Porter, D.O. (1981) 'Implementation Structures: A New Unit of Administrative Analysis', *Organizational Studies*, 2, 211- 227.

Hodder, I. (1994). 'The Interpretation of Documents and Material Culture'. In Denzin And Lincoln (eds), *'Handbook of Qualitative Research'*. London: Sage.

Hogwood , B.W. and Gunn, L. (1984) *'Policy Analysis for the Real World'*, Oxford: Oxford University Press.

Hood, C.C. (1976) *'The Limits of Administration'*. London: John Wiley.

Howlett, M. & Ramesh, M. (2003). *'Studying Public Policy: Policy Cycles and Policy Subsystems'*. Don Mills, Ontario: Oxford University Press.

Hudson, B. (1989) *'Michael Lipsky and Street-Level Bureaucracy: A neglected Perspective'*, In L. Barton (ed.) *Disability and Dependency*, London: Falmer Press

Hudson, J., & Lowe, S. (2004). '*Understanding the Policy Process: Analysing Welfare Policy and Practice*'. Bristol: The Policy Press, University of Bristol.

Iranian National Statistics Unit, (2007), '*The Results for National Census in 2007*', Tehran, Iran.

Issues in Current Service Provision (1998) 'Implementation of the New South African Abortion Law: A six Month Overview from Hospital Reports, *Reproductive Health Matters*, 6: 145- 158.

Jackson, G. B. (1980) 'Methods for integrative reviews', *Review of Educational Research*, 50 (3): 438-460.

Jafarisirizi, M., Rashidian, A., Abolhassani, F., Mohammad, K., Yazdani, S., Parkerton, P., Younesian, M., Akbari, F., & Arab M. (2008), 'Space or No Space for Managing Public Hospitals: a Qualitative Study of Hospital Autonomy in Iran, [unpublished manuscript].

Jaye, C. (2002). 'Doing Qualitative Research in General Practice: Methodological Utility and Engagement'. *Family Practice*, 19: 557-562.

Jessop, B. (2001). 'Institutional (Re)turns and Strategic-Relational Approach'. *Environment and Planning*, 1213- 35.

John, P. (2002) '*Analysing public Policy*'. London/New York: Continuum.

John, P. (2003). 'Is There Life After Policy Streams, Advocacy Coalitions, and Punctuations: Using Evolutionary Theory to Explain Policy Change?'. *The Policy Studies Journal*, 31 (4): 481- 98.

Jones, B., & Baumgartner, F. (2005). '*The Politics of Attention*', Chicago: University of Chicago Press.

Jones, S. (1985). 'Depth Interviewing', in R. Walker (eds), '*Applied Qualitative Research*'. Aldershot: Gower.

Jupp, V. (1996). 'Documents and Critical Research', in Sapsford & Jupp (eds), '*Data Collection & Analysis*', London: Sage.

Kaner, E., Steven, A., Cassidy, P., Vardy, C. (2003) 'Implementation of a Model For Service Delivery and Organization in Mental Healthcare: A Qualitative Exploration of Service Provider Views', *Health and Social Care in the Community*, 11 (6): 519- 527.

Khan, M.E. & Manderson, L. (1992). 'Focus Groups in Tropical Diseases Research'. *Health Policy & Planning*. 7:56-66.

Kingdon, J. (2003). '*Agendas, Alternatives and Public Policies*'. 2nd Edition. New York: HarperCollins.

Kinsman, J. Harrison, S. Kengeya-Kayondo, J. Kanyesigye, E. Mouske, S. & Withworth, J. (1999) 'Implementation of a Comprehensive AIDS education Programme for Schools in Masaka District, Uganda', *AIDS Care*, 11 (5): 591- 601.

- Kirk, J. Miller, M.L. (1985) '*Reliability and Validity in Qualitative Research*', London: Sage.
- Kitzinger, J. (1994) 'The Methodology of Focus Groups: The Importance of Interaction between Research Participants', *Sociology of Health & Illness*, 16 (1): 103- 121.
- Klein, R. (2000) 'From Evidence-Based Medicine to Evidence-Based Policy?', *J Health Serv Res Policy*, 5 (2): 65- 66.
- Klein, R., & Marmor, TR. (2005). '*Reflections on Policy Analysis: Putting it Together Again*', in Moran (eds), *The Oxford Handbook of Public Policy*, pp. 890-910.
- Kuhn, T. (1970). '*The Structure of Scientific Revolution*'. Chicago: University of Chicago Press.
- Kumar, S. & Gantley, M. (1999) 'Tensions Between Policy Makers and General Practitioners in Implementing New Genetics: Grounded Theory Interview Study', *BMJ*, 319: 1410- 1413.
- Kvale, S., (1996) '*Interviews: An Introduction to Qualitative Research Interviewing*'. Sage Publications, Thousand Oaks, CA
- Lane, J.E. (1987) 'Implementation, Accountability and Trust', *European Journal of Political Research*, 15 (5): 527- 46.
- Lavis, J. N., Farrant, M. S. R., Stoddart, G. L., (2001) 'Barriers to Employment-related Healthy Public Policy in Canada', *Health Promotion International*, 16 (1): 9- 19.
- Lee, T.W., (1999) '*Using Qualitative Methods in Organizational Research*'. Sage Publications, Thousand Oaks, CA.
- Lazin, F. (1995). 'Lessons for the Study of Policy Implementation: Project Renewal in Israel'. *Governance: An International Journal of Policy and Administration*, 8: 261- 79.
- Le Grand, J., Mays, N. & Mulligan, J.A. (1998) '*Learning from the NHS Internal Market: A Review of the Evidence*'. London: King's Fund.
- Lewis, JM. (2004). 'Partnership, Primary Health Care and Health Inequalities'. *Australian Journal of Primary Health*, 10 (3): 38- 45.
- Lewis, JM. (2005). 'A Network Approach for Researching Partnerships in Health', *BioMed central, Australia and New Zealand Health Policy*, 2:22, 1-11. doi:10.1186/1743-8462-2-22.
- Leys, M. (2003). 'Health Care Policy: Qualitative Evidence and Health Technology Assessment'. *Health Policy*, 65: 217-226.
- Lincoln, Y.S. & Guba, E.G. (1985). '*Naturalistic Inquiry*'. London: Sage.
- Linder, S.H. and Peters, B.G. (1989) 'Instruments of Government: Perceptions and Contexts', *Journal of Public Policy*, (9): 35- 58.
- Lindblom, CE. (1959). 'The Science of Muddling through'. *Public Administrative Review*, 19: 79- 88.

Lipsky, M. (1980) '*street-level Bureaucracy: Dilemmas of the Individual in Public Services*'. New York: Russell Sage Foundation.

Lovkyte, L., & Padaiga, Z. (2001). 'Physician Workforce Reform in Lithuania: An Inevitable Transition'. *Cah Soc Dem Med*, Jul- Dec; 41 (3-4): 347- 68.

Manor, J. (1991) '*Re-thinking Third World Politics*'. Longman, London.

Marais, H. (1997) 'The RDP: Is There Life after Gear?', *Development Update: Quarterly Journal of the South African National NGO Coalition and INTERFUND*, 1 (1), 10.

March, JG., & Olsen, JP. (1989). '*Rediscovering Institutions: The Organizational Basis of Politics*'. New York: Free Press.

Marsh, D. & Rhodes, R.A.W. (1992) 'Policy Communities and Issue Networks: Beyond Typology. In *Policy Networks in British Government*, edited by Marsh and Rhodes. Oxford: Oxford University Press.

Mays, N. (1997). 'Research into purchasing health care: time to face the challenge'. *J Epidemiol Community Health*.51(3):339.

Mays, N. & Pope, C. (1995). 'Qualitative Research: Rigour and Qualitative Research'. *British Medical Journal*, 311: 109-12.

Mays, N. & Pope, C. (1997). '*Qualitative Research in Health Care*'. 1st ed. London: BMJ Publication Group.

Mays, N. & Pope, C. (1999). Quality in Qualitative Health Research. In '*Qualitative Research in Health Care*'. London: BMJ Publication Group.

Mays, N. & Pope, C. (2000). 'Qualitative Research in Health Care. Assessing Quality in Qualitative Research'. *BMJ*: 320 (7226): 50-2.

Mays, N., Wyke, S., Malbon, G, and Goodwin, N. (2001). '*The Purchasing of Health Care by Primary Care Organizations*'. Buckingham: Open University Press in Association with King's Fund.

Mazmanian, D.A & Sabatier, P.A. (1983) *Implementation and Public Policy*. Glenview, Ill.: Scott, Foresman.

McDonald, I. Willis, E. (eds) *Researching Health Care: Design, Dilemmas, Disciplines*, London: Routledge.

McDonald, R., Harrison, S., Checkland, K., Campbell, SM., & Roland, M. (2007). 'Impact of Financial Incentives on Clinical Autonomy and Internal Motivation in Primary Care: Ethnographic Study'. *BMJ*: 334:1357.

McKenzie J.I. (2004). 'Walkerton: Requiem for the New Public Management in Ontario?'. *International Journal of Environment and Pollution*, 21(4): 309-324.

Merriam, SB., Johnson-Bailey, J., Lee, MY. (2001) 'Power and Positionality: Negotiating Insider/Outsider Status Within and Across Cultures'. *Int'l Journal of Lifelong education*. 20: 405- 16.

- Miller, O. (2002). 'The Impact of Theories of 'New Public Management' on the Provision of Support Services for Low-incidence Special Needs'. *European Journal of Special Needs Education*, 17(1): 67-75.
- Mills, M. (1992). 'The case of Food and Health and the Use of Network Analysis', in *Policy Network in British Government*, ed by Marsh & Rhodes, Oxford: Oxford University Press.
- Miles, M. & Huberman, A. (1984) '*Qualitative Data Analysis*', London: Sage
- Miles, M. & Huberman, A. (1994). '*Qualitative data analysis: an expanded sourcebook*'. 2nd ed. London: Sage.
- Mitchel, J.C. (1983). 'Case and Situation Analysis'. *Sociological review*: 31: 187-211.
- Morse, J.M., Barret, M., Mayan, M., Olson, K., and Spiers, J. (2002). 'Verification Strategies for Establishing Reliability and Validity in Qualitative Research'. *Int Journal of Qualitative Methods*, (1), Retrieved from <http://www.ualberta.ca/ijqm>.
- Morse, J.M & Field, P.A. (1996). 'Principles of data collection'. In *Nursing research: the application of qualitative approaches*. 2nd edition. London: Chapman and Hall.
- Mosquera, M. Zapata, Y. Lee, K. Arango, C. Varela, A. (2001) 'Strengthening User Participation through Health Sector Reform in Colombia: A study of Institutional Change and Social Representation', *Health Policy and Planning*, 16 (Suppl 2): 52- 60.
- Mullins, L. (2002) '*Management and Organizational Behaviour*', 6th Harlow, England: Prentice Hall.
- Murphy, E., Dingwall, R., Greatbatch, D., Parker, S. and Watson, P. (1998). 'Qualitative Research in Health Technology Assessment: A review of the Literature.'. *Health technology Assessment*, 2, 16.
- Murphy, E. & Mattson, B. (1992). 'Qualitative Research and Family Practice: a Marriage Made in Heaven?'. *Family Practice*, 9; 85-91.
- NACOSA, (1994) '*A National AIDS Plan for South Africa 1994-5*'. Pretoria: National Secretariat, National AIDS Committee of South Africa.
- National Unit for Health Services Reform, (2005 a),' Ministry of Health & Medical Education (MOHME), '*Health System Reform in the Islamic Republic of Iran*', 2nd ed, Tehran: Iran.
- National Unit for Health System Reform, (2005 b) '*Health System Reform in Islamic Republic of Iran*', Ministry of Health & Medical Education, Tehran: Iran.
- National unit for PHC Expansion & Health Promotion, (2007) '*The Operational instruction for FM and Behbar, Version 8.00*', Ministry of Health & Medical Education, Tehran: Iran.
- Nelson, B.J. (1978). 'Setting the Public Agenda: The Case of Child Abuse'. In *The Policy Cycle*, May, J.V., & Wildavsky, A.B. (eds). Beverly Hills: SAGE.

- Noblet A., Rodwell J., & McWilliams J. (2006). 'Organizational Change in the Public Sector: Augmenting the Demand control Model to Predict Employee Outcomes Under New Public Management'. *Work and Stress*, 20(4): 335-352.
- Nohrstedt, D. (2005). 'External Shocks and Policy Change: Three Mile Island and Swedish Nuclear Energy Policy'. *Journal of European Public Policy*, 12(6): 1041- 59.
- Nutbeam, D., (1997) 'Promoting Health and Preventing Disease: An International Perspective on Youth Health Promotion', *Journal of Adolescent Health*, 20: 396-402.
- Office of Family Health and Population (2000) '*Face of Population and Health in Islamic Republic of Iran*', Ministry of Health and Medical Education, Tehran: Iran.
- O'Neil, M., & Pederson, A.P., (1992) 'Building a Methodological Bridge Between Public Policy Analysis and Healthy Public Policy', *Canadian Journal of Public Health*, 83 [Suppl. 1], S25- S30.
- Organization for Economic Co-operation and Development (1994) '*The Reform of Health Care Systems*'. Paris: OECD.
- Orsman, B. (1999) '*Shipley Attack Blunted by Hospital Concerns*'. Weekend Herald, Auckland. P.A6, November 20-21.
- Osborne, D.E. and Gaebler, T.A. (1992) '*Reinventing Government: How the entrepreneurial Spirit is Transforming the Public Sector*'. Reading, MA: Addison- Wesley.
- Ostrom, E. (1999 & 2007). 'Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework', in Sabatier, P., ed., *Theories of the Policy Process*. Boulder CO: Westview Press.
- O'Toole, L.J., jr (1986) 'Policy Recommendations for Multi-actor Implementation: An Assessment of the Field', *Journal of Public Policy*, 6 (2): 181- 210.
- O'Toole, L.J., jr (1993) 'Inter-organizational Policy Studies: Lessons Drawn from Implementation Research', *Journal of Public Administration Research and Theory*, 3 (2): 232- 51.
- O'Toole, L.J., jr (1994) 'Economic Transition, constitutional Choice, and Public Administration: Implementing Privatization in Hungary', *Journal of Public Administration Research and Theory*, 4 (4): 493- 519.
- O'Toole, L.J., Jr (1995) 'Rational Choice and Policy Implementation', *American Review of Public Administration*, 25 (1): 43-57.
- O'Toole, L.J., jr (1997a) 'Networking Requirements, Institutional Capacity, and Implementation Gaps in Transitional Regimes: The Case of Acidification Policy in Hungary', *Journal of European Public Policy*, 4 (1): 1- 17.
- O'Toole, L. (1997b). 'Treating Networks Seriously: Practical and research-based Agendas in Public Administration'. *Public Administration Review*, 57: 45- 51.

- Overtveit, J. (2001) '*Organizational Behaviour Research in Health Care: an Overview*'. In *Organizational Behaviour and Organizational Studies in Health Care: Reflections on the Future*. Ashburner, L (eds). Pp. 1- 17. New York: Palgrave.
- Parkhurst, JO. (2002). 'The Ugandan Success Story? Evidence and Claims of HIV-1 Prevention'. *The Lancet*, 360; 78- 80.
- Pathman, D.E., Konard, T.R., Freed, G.L., Freeman, V.A., and Koch, G.G. (1996). 'The Awareness to Adherence Model of the Steps to Clinical Guideline Compliance'. *Medical Care*, 34: 873-889.
- Patton, M.Q. (1990). '*Qualitative Evaluation & Research Methods*', 2nd ed. London: Sage.
- Patton, M.Q. (1999). 'Enhancing the Quality and Credibility of Qualitative Analysis'. *Health Services Research*. 34:1189-1208.
- Patton, M.Q. (2002). '*Qualitative Research & Evaluation Methods*'. 3rd ed. London: Sage.
- Perry, S. (1994) '*Living with Multiple Sclerosis*', Aldershot: Avebury.
- Peters, T.J. & Waterman, J.R. (1982). '*In Search of Excellence: Lessons from America's Best-Run Companies*'. New York: Harper & Row.
- Plaza, B., Barona, B., Hearst, N., (2001) 'Managed Competition for the Poor or poorly Managed Competition? Lessons from the Colombian Health Reform Experience', *Health Policy and Planning*, 16 (Suppl 2): 44- 51.
- Phillips, RL. (2005). 'Primary Care in the United States: Problems and Possibilities'. *BMJ*, 331- 1400- 2.
- Pollitt, C. (1993). 'The Politics of Medical Quality: Auditing Doctors in the UK and the USA'. *Health Services Management Research*, 6(1): 24-34.
- Pope, C. & Mays, N. (1995). 'Qualitative Research: Reaching the Parts Other Methods cannot Reach: An Introduction to Qualitative Methods in Health and Health Services Research'. *British Medical Journal*, 311: 42-5.
- Pope, C., Ziebland, S., and Mays, N. (1999). Analysing Qualitative Data. In '*Qualitative Research in Health Care*', edited by Pope & Mays. London: BMJ Publishing Group.
- Pope, C., Ziebland, S., and Mays, N. (2000). Analysing qualitative data. *BMJ*, 320, 114-116.
- Population reference Bureau (1978), World Population Data Sheet.
- Population Reference Bureau, (2004) '*World Population Data Sheet: Demographic Data and Estimates for the Countries and Regions of the World*', Washington DC: USA.
- Pressman, J.L. and Wildavsky, A. (1984) *Implementation*: 3rd edn. Berkeley: University of California Press. (1st edn, 1973; 2nd edn, 1979).
- Prior, L. (2003). '*Using Documents in Social Research*'. London: Sage.

Punch, K.F. (1998). *'Introduction to Social Research: Quantitative and Qualitative Approaches'*. London: Sage.

Rashidian, A. (2004). *'Study of Adherence to Guidelines and Evidence (SAGE): Theory-based analyses of beliefs, attitudes and prescribing outcomes in British primary care'*, PhD thesis submitted to the University of York, UK.

Rashidian, A., Eccles, M.P., & Russell, I. (2008). 'Falling on Stony Ground? A Qualitative Study of Implementation of Clinical Guidelines' Prescribing Recommendations in Primary Care'. *Health Policy*, 85: 148–161.

Read, M. (1996). *'The Politics of Tobacco: Policy Networks and the Cigarette Industry'*. Aldershot: Avebury.

Reich, M. (1994) *'The Politics of Health Sector Reform in Developing Countries: Three Cases of Pharmaceutical Policy'*. Working Paper 10. Harvard School of Public Health, Boston, USA.

Renggli, S., & Schupfer, G. (2003). 'Principal-Agent Theory: Implications for Hospital Funding and Failures of the New Public Management Theory in the Swiss Public Health Sector'. *Swiss Surgery*. 9(SUPPL. 2): 21-24.

Rese, A., Balabanova, D., Danishevski, K., McKee, M., Sheaff, R., (2005) 'Implementing General Practice in Russia: Getting Beyond the First Steps', *British Medical Journal*, 331: 204- 207.

Rhodes, R.A.W. (1988). *'Beyond Westminster and Whitehall.'* London: Unwin Hyman.
Richards, T.J. & Richards, L., (1997) *'QSR NUD*IST 4 Users Guide'*, 2nd edn. La Trobe University, Victoria.

Riker, W. (1980). 'Implications from the Disequilibrium of Majority Rule for the Study of Institutions'. *American Political Science Review*, 90: 534- 54.

Ripley, R., & Franklin, G. (1992). *'Bureaucracy and Policy Implementation'*. Homewood, IL: Dorsey.

Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research. In *Analysing qualitative data*. Bryman A and Burgess R (eds). pp 173-194. London: Routledge.

Roberts, MJ., Hsiao, W., Berman, P., Reich, MR. (2004). *'Getting Health Reforms Right. A Guide to Improving Performance and Equity'*. Oxford: Oxford University Press.

Robinson, R., & Le Grand, J. (1994). *'Evaluating the NHS Reforms'*. London: King's Fund Institute.

Rocheffort, DA., & Cobb, RW. Eds (1994). *'The Politics of Problem Definition: Shaping the Policy Agenda'*. Lawrence: University Press of Kansas.

Rose, R. (1991). 'What is Lesson-Drawing'. *Journal of Public Policy*, 11 (1): 3- 30.

Rossi, P.H., Freeman, H.E. & Lipsey, M.W. (1999) *'Evaluation: A Systematic Approach'*. Thousand Oaks: Sage.

- Rothstein, B. (1998) *'Just Institutions Matter: The Moral and Political Logic of the Universal Welfare State'*, Cambridge: Cambridge University Press.
- Sabatier, P. A. (1986) 'Top-down and Bottom-up Approaches to Implementation Research: A critical analysis and Suggested Synthesis', *Journal of Public Policy*, 6 (1): 21- 48.
- Sabatier, P.A. (1999). *'Theories of the Policy Process: Theoretical Lenses on Public Policy'*, Boulder, Colo.: Westview Press.
- Sabatier, P.A. (2007). *'Theories of the Policy Process: Theoretical Lenses on Public Policy'*, Boulder, Colo.: Westview Press.
- Sabatier, P., Hunter, S., & McLaughlin, S. (1987). 'The Devil Shift: Perceptions and Misperceptions of Opponents'. *The Western Political Quarterly*, 40 (3): 449- 76.
- Sabatier, P.A. and Jenkins-Smith, H. (1993) *'Policy Changes and Learning: An Advocacy Coalition Approach'*. Boulder, Colo.: Westview Press.
- Sabatier, P.A. and Jenkins-Smith, H. (1999) *'Policy Changes and Learning: An Advocacy Coalition Approach'*. Boulder, Colo.: Westview Press.
- Sabatier, P. and Mazmanian, D. A. (1979) 'The Conditions of Effective Implementation: A Guide to Accomplishing Policy Objectives', *Policy Analysis*, 481- 504.
- Sabatier, P.A. and Mazmanian, D.A. (1980) 'The Implementation of Public Policy; A Framework of Analysis', *Policy Studies Journal*, 8 (Special issue): 538- 60.
- Sabatier, P. & Zafonte, M. (1999). 'Are Bureaucrats and Scientists Members of Advocacy Coalitions?' In Sabatier, ed., *An Advocacy Coalition Lens on Environmental Policy*. Cambridge, Mass, MIT Press.
- Sackett, D.L. Richardson, W.S. et al. (1997) *'Evidence-Based Medicine. How to Practice and Teach EBM'*. New York: Churchill Livingstone.
- Saetren, H. (2005) 'Facts and myths about research on policy implementation: Out-of-fashion, allegedly dead, but still very much alive and relevant', *Policy studies journal*, 33(4):559-582.
- Saltman, R., Bankauskaite, V., Vrangbaek, K., eds. (2007). *'Decentralization of European Health Systems'*. Geneva/Buckingham: WHO/Open University Press.
- Scharpf, F. W. (1997). *'Games Real Actors Play: Actor-Centered Institutionalism in Policy Research'*. Boulder, CO: Westview Press.
- Schlager, E. (1995). 'Policy Making and Collective Action: Defining Coalitions Within the Advocacy Coalition Framework', *Policy Science*, 28: 242- 70.
- Schlager, E. (2007). 'A Comparison of Frameworks, Theories, and Models of Policy Processes'. In: Sabatier, P.A. (2007). *'Theories of the Policy Process: Theoretical Lenses on Public Policy'*, Boulder, Colo.: Westview Press.
- Schlager, E., & Blomquist, W. (1996). 'A Comparison of Three Emerging Theories of the Policy Process', *Political Research Quarterly*, 49 (Sept.) 651- 72.

- Schneider, H., Stein, J., (2001) 'Implementing AIDS Policy in Post-apartheid South Africa', *Social Science and Medicine*, 52: 723- 731.
- Schofield, J. (1993) 'Increasing the Generalisability of Qualitative Research, in: Hammersley, M. (ed) *Social Research*', London: Sage.
- Schofield, J. (2004). 'A Model of Learned Implementation'. *Public Administration*, 82 (2): 283- 308.
- Seale, C. (1999). '*The Quality of Qualitative Research*'. London: Sage.
- Seale, C. Silverman, D. (1997) 'Qualitative Method: Ensuring Rigour in Qualitative Research', *European Journal of Public Health*, 7(4): 379-384doi:10.1093/eurpub/7.4.379
- Shadpour, K. (2000) 'Primary Health Care Networks in the Islamic Republic of Iran', *Eastern Mediterranean Health Journal*, Vol 6 (4).
- Sheaff R., & Lloyd-Kendall, A. (2000). 'Principal-Agent Relationships in General Practice: The First Wave of English Personal Medical Services Pilot Contracts. *Journal of Health Services Research and Policy*, 5(3): 156-163.
- Shiffman, J., (2004) 'Political Management in the Indonesian Family Planning Programme', *International Family Planning Perspectives*, 30 (1): 1- 14. Also: <http://www.guttmacher.org/pubs/journals/3002704.html>.
- Shiffman, J. (2007). 'Generating Political Priority for Maternal Mortality Reduction in 5 Developing Countries'. *American Journal of Public Health*, 97: 796- 803.
- Silverman, D. (1993) 'Interpreting Qualitative Data: Methods for Analysing Talk, text and Interaction', London: Sage.
- Silverman, D. (1998) 'The Quality of Qualitative Health Research: The Open-Ended Interviews and its Alternatives', *Social Science in Health*, 4 (2): 104- 118.
- Silverman, D. (2000) '*Doing Qualitative Research, A Practical Handbook*', London: Sage.
- Sinha, T. Ranson, KM. Chatterjee, M. Acharya, A. Mills, AJ. (2006) 'Barriers to Assessing Benefits in a Community-based Insurance Scheme: Lessons Learnt from SWEA Insurance, Gujarat', *Health policy and Planning*, 21 (2): 132- 142; doi: 10.1093/heapol/czj010
- Smircich, L., & Morgan, G., (1982) 'Leadership: The Management of Meaning', *The Journal of Applied Behavioural Science*, 18 (3): 257- 273.
- Smith, MJ. (1993). '*Pressure, Power and Policy*'. Hemel Hempstead: Harvester Wheatsheaf.
- Smith, PC. (2002). 'Measuring Health System Performance. *European Journal of Health Economics*, 3(3): 145-148.
- Spencer, L., Ritchie, J., Lewis, J., and Dillon, L. (2003). '*Quality in Qualitative Evaluation: A Framework for Assessing Research Evidence*'. London: Government Chief Social Researcher's Office.

- Spillane, J. (1998). 'A Cognitive Perspective on the Role of The Local Educational Agency in Implementing Instructional Policy: Accounting for Local Variability', *Educational Administration Quarterly*, 34; 31-57.
- Stake, R. (1995). 'Triangulation', in R. Stake (eds), *The Art of Case Study Research*. London: Sage.
- Starfield, B. (1998). 'Primary Care. Balancing Health Needs, Services, and Technology'. New York: Oxford University Press.
- Starfield, B., Shi, I., & Makinco, J. (2005). 'Contributions of Primary Care to Health Systems and Health'. *Milbank Q*, 83: 457- 502.
- Starkiene, L., Smigelskas, K., Padaiga, Z., & Reamy, J. (2005). 'The Future of Lithuanian Family Physicians: A 10-year Forecasting Study'. BMC Family Practice.
- Steinmo, S. & Thelen, K. (1992). 'Historical Institutionalism in Comparative Politics', in Steinmo, Thelen, & Longstreth, eds. *Structuring Politics*. Boulder, CO: Westview Press.
- Stone, D. (1998). 'Policy Paradox. The Art of Political Decision Making'. New York & London: WW Norton & Company.
- Stone, D. (2001). 'Learning Lessons, Policy Transfer and the International Diffusion of Policy Ideas'. *CSGR Working Paper No. 69/01*. Coventry: Centre for the Study of Globalisation and Regionalisation, University of Warwick.
- Streek, W., & Thelen, K., eds. (2005). 'Beyond Continuity. Institutional Change in Advanced Political Economics'. Oxford: Oxford University Press.
- Sweeney, K., & Mannion, R., (2002) 'Complexity and Clinical Governance: Using the Insights to Develop the Strategy', *British Journal of General Practice*, 52 (Suppl.): S4- S9.
- Takian, A. (2008) 'Facilitators of and Obstacles to the Implementation of Family Medicine in Iran', Presentation in 25th Annual Research Meeting, 8-10 June 2008, Washington DC. USA.
- Takian, A. & Kabir, M. (2007) 'Reverse Path-dependency Controls the Implementation of Family Medicine in Iran?!', Presentation in the 10th Annual conference of UK Federation of Primary Care Research Organizations, 29-30 November 2007, Cambridge, UK.
- Tantivess, S., & Walt, G. (2008). 'The Role of State and Non-state Actors in the Policy Process: The Contribution of Policy Networks to the Scale-up of Antiretroviral Therapy in Thailand'. *Health Policy and Planning*, 23: 328-338; doi:10.1093/heapol/czn023.
- Tavassoli, M. (2008). 'Iranian Health Houses Open the Door to Primary Care'. *Bulletin of the World Health Organization*, August 2008, 86 (8): 585-6.
- Taylor, P. (1984). 'Smoke Ring: The Politics of Tobacco', in Cairney, P. (2007). 'A "Multiple Lenses" Approach to Policy Change: The Case of Tobacco Policy in the UK'. London: The Bodley Head.

- Thatcher, M. (1998). 'The Development of Policy Network Analyses'. *Journal of Theoretical Politics*, 10 (4), 389-416. DOI: 10.1177/0951692898010004002.
- Tranfield, D. Starkey, K. (1998) 'The Nature, Social Organization and Promotion of management Research: Towards Policy', *British Journal of management*, 9: 341- 53.
- Tuohy, CH. (2003). 'Agency, Contract, and Governance: Shifting Shapes of Accountability in the Health Care Arena'. *Journal of Health Politics, Policy and Law*, 28(2-3): 195-215.
- United Nation Development Programme (UNDP) (2003) '*Human Development Report*', Budget and Planning Organization, Tehran: Iran.
- United Nations Population Fund (UNPD) (1998) 'Present and Future of population Programmes, Family Planning, and Fertility Health in the Islamic Republic of Iran', Tehran: Iran.
- Vaezmahdavi, M. Rafiefar, S. (2005) '*Strategic Planning for People & Societies Enrichment to Health & Welfare Promotion in the Islamic Republic of Iran*', Deputy of Policy Making & Planning, Ministry of Welfare & Social Security, Tehran- Iran.
- Van Meter, D. and Van Horn, C.E. (1975) 'The Policy Implementation Process: A conceptual Framework', *Administration and Society*, 6 (4): 445- 88.
- Vickers, G. (1965). '*The Art of Judgement; a Study of Policy Making*'. New York: Basic Books.
- Vissandje'e, B., Abdool, S., and Dupe'r'e, S. (2002). 'Focus Groups in Rural Gujarat, India: A Modified Approach. *Qualitative Health Research*, 12; 826-43.
- Waitzkin, H. (1991) '*The Politics of Medical Encounters*', New Haven: Yale University Press.
- Walker, J. (1969). 'The Diffusion of Innovations Among the American States', *American Political Science Review*, 63: 880- 99.
- Walker, J. (1971). 'Setting the Agenda in the U.S. Senate: A Theory of Problem Selection'. *British Journal of Political Science*, 7: 423- 55.
- Walker, L. and Gilson, L. (2004) 'We Are Bitter But We Are Satisfied: Nurses as Street-Level Bureaucrats in South Africa', *Social Science and Medicine*, 59: 1251- 1261.
- Walt, G. (1994) '*Health Policy: An Introduction to Process and Power*'. London: Zed Books.
- Walt, G., & Gilson, L. (1994) 'Reforming the Health Sector in Developing Countries: the Central Role of Policy Analysis', *Health Policy and Planning*, 9 (4): 353- 70.
- Walt, G., Shiffman, J., Schneider, H., Murray, SF., Brugha, R., & Gilson, L. (2008) 'Doing Health Policy Analysis: Methodological and Conceptual Reflections and Challenges', *Health Policy and Planning*, 2008: 1-10. doi:10.1093/heapol/czn024.
- Ward, H. (1995) '*Rational Choice Theory*', in D. Marsh and G. Stoker (eds) '*Theory and Methods in Political Science*', Basingstoke: Macmillan.

- Watt, S., Sword, W., Krueger, P., (2005) 'Implementation of a Health Care Policy: An Analysis of Barriers and Facilitators to Practice Change', *BMC Health Services Research*, (5): 53, <http://www.biomedcentral.com/1472-6963/5/53>.
- Weible, CM., & Sabatier, P. (2005). 'Comparing Policy Networks: Marine Protected Areas in California'. *The Policy Studies Journal*, 33 (2): 181- 201.
- Weick, KE. (1979). '*The Social Psychology of Organizing*', 2d ed. New York: Random House.
- Wibulpolprasert, S. (2008). 'Prospects for Scaling Up PHC: Experience from Thailand'. *Presentation in Alma-Ata 30 years on Symposium*, London, 11-12 September 2008, and my face to face interview with him at the same date.
- Williams, M. (2000). 'Interpretivism and Generalisation'. *Sociology*, 34, 2: 209- 224.
- Wisford, D. (1994). 'Path Dependency, or Why History Makes it Difficult But Not Impossible to Reform Health Care Systems in a Big Way'. *Journal of Public Policy*, 14(3): 251-283.
- Wisford, D. (2000). 'Ideas, Institutions, and Resources'. *Journal of Health Politics, Policy and Law*, 25 (5): 975- 8.
- Wilson, JQ. (1989). '*Bureaucracy*'. New York: BasicBooks.
- World Bank, (1999) '*Health Financing Reform in Iran: Principles and Possible Next Steps*', Prepared for: Social Security Research Institute, Health Economics Congress, Tehran-Iran.
- World Health Organization. (2000). '*Health Systems: Improving Performance*'. Geneva: WHO. www.who.int/whr/2000/en/.
- World Health Organization Health Evidence Network. (2004). '*What are the Advantages and Disadvantages of Restructuring a Health Care System to be More Focused on Primary care Services?*'. Geneva: WHO.
- World Health Organization. (2008). '*Primary Health Care: Now More Than Ever*'. The world Health report 2008. Geneva: WHO. http://www.who.int/whr/2008/whr08_en.pdf.
- Yin, R.K., (1993) '*Applications of Case Study Research*'. Sage Publications, Thousand Oaks, CA.
- Yin, R.K., (1994) '*Case Study Research: Design and Methods*'. 2nd edn, Sage Publications, Thousand Oaks, CA.
- Zafonte, M., & Sabatier, P. (1998). 'Shared Beliefs and Imposed Interdependencies as Determinants of Ally Networks in Overlapping Subsystems', *Journal of Theoretical Politics*, 10 (4): 473- 505.
- Zafonte, M., & Sabatier, P. (2004). 'Short-term Versus Long-term Coalitions in the Policy Process: Automobile Pollution Control, 1963- 1989'. *Policy Studies Journal*, 32 (1): 75- 107.

Zahariadis, N. (1995). *'Market, States and Public Policies: Privatization in Britain and France'*. Ann Arbor: University of Michigan Press.

Zahariadis, N. (1996). 'Selling British Rail: An Idea Whose Time Has Come?'. *Comparative Political Studies*, 29: 400-422.

Zahariadis, N. (1999). 'Ambiguity, Time, and Multiple Streams', in Sabatier, P., ed., *Theories of the Policy Process*. Boulder: Westview Press, 73- 93.

Zhang, HX. (2004). 'The Gathering Storm: AIDS Policy in China'. *Journal of International Development*. 16: 1155- 68.

APPENDIX I. List of interviewees and focus group participants at three levels (Including the feasibility study)

<i>National</i>	<i>Provincial Golestan (G)</i>	<i>Local</i>
1- A former senior post holder in the MoH	1- A senior manager at the Golestan university	1- Head of A health district (Northeast of Capital of the province), A GP and two of his GP colleagues
2- A current senior official in the MOH	2- An official in the GMIO	2- 1 FDs, 2 behvarzes, 1 nurse, 1 midwife, 1 dentist, and 1 family planning expert.in G rural health centre (60 KM from Capital of the province).
3- A member of 7 th parliament	3- A senior manager at GMU	3- Focus group with 2 imams, one teacher, 2 councilor, 1 manager of local village bank, and 2 behvarzes as public representatives in the village of G. Teacher was invited for individual interview.
4- A former senior official in the MWSS	4- A senior manager at GMU	4- Head of B health district (Northwest of Capital of the province), a GP. His deputy was an environmental health expert who was also a member of Village Islamic Council. All were interviewed.
5- A senior policy maker in the MWSS	5- A representative from GMA	5- 3 FDs, 1 behvarze, 1 nurse, 2 midwives, 1 dentist, 1 expert in family planning, and 1 expert in communicable diseases, and one doctor from private sector in H health centre (70 KM from Capital of the province).
6- A post holder in GPA	6- A very top official in Golestan province	6-,1 imam and 1 councilor in the city of H were individually interviewed.
7- A senior policy maker in NUHSR	7- A technical officer in GMU	7- Head of C health district (East of Capital of the province), a GP
8- A senior official in the MPO	8- A senior official in Golestan Province	8- 2 FDs, 1 nurse, 1 nurse assistant, 1 midwife, 1 behvarz, an occupational

		health expert, and a pharmacy assistant in C health centre.
9- A former senior health official	9- An MP from Golestan province	9- An imam and a member of parliament were individually interviewed.
10- A former senior official in the MIO		10- Head of D health district (East of Capital of the province), GP
11- A current senior manager in the MOH		11- 2 FDs, 1 nurse, 1 midwife, 1 expert in family planning, 1 expert in non communicable diseases, and 1 behvarz from I rural health centre (65 KM from Capital of the province) .
12- A current top official in the MOH		12- A focus group was held participating by 1 imam, 2 behvarzes, head of police, 1 councilor, 1 teacher, governor of the city, and 2 trustworthy elderly, in the village of I. Teacher and governor were also individually interviewed.
13- A senior policy maker in the MWSS		13- Head of E health district (Southeast of Capital of the province), GP. His deputy in communicable disease was a GP. Head of informatics in the district was an experienced environmental health expert.
14- A former senior post holder in the MOH		14- 3 FDs, 1 midwife, 1 nurse, 1 expert in environmental health, 1 expert in family planning, and one doctor from private sector in J health centre (120 KM from Capital of the province) .
15- A senior manager in the MIO		15- A focus group with: the imam, 3 councilors, head teacher, 3 elderly trust worthies, 1 behvarz, 1 health centre receptionist, head of police in the village, and 1 police man was held in the village of J. Imam and one councilor were individually interviewed.

16- A former senior official in the MIO		16- Head of F health district (Northeast of Capital of the province) a GP. His deputy was a GP.
17- A former senior member of the NUHSR		17- 3 FDs, 1 nurse, 1 midwife, 1 expert in radiography, 1 assistant pharmacist, 1 environmental health expert, and two doctors from private sector in K health centre (160 KM from Capital of the province).
18- An international health official in Iran		18- 1 councillor and governor general of the city of K were individually interviewed.
19- An international health official in Iran		
20- A former senior official in the MOH (During feasibility study)		
21- A current manager in the MOH (During feasibility study), advocate of FM		

APPENDIX II. Interview guides for three levels

1- National level

“Implementing Family medicine in Iran: Identification of Facilitators & Obstacles”

Amirhossein Takian

Interview guide to be used at national level

Date & venue:

Name & position of interviewee:

General questions and materials that must be covered during interviews with officials at national level, which are subject to change; delete; expansion and refine according to the position and compliance of individuals (will be employed reflexively). Selected theories of implementation, results of reviewing empirical articles on facilitators of and obstacles to the implementation in health care and insights from exploratory visits to Iran have been largely considered to define these guide questions.

- 1- First of all, please explain your broad perception of family medicine (FM) in Iran.
- 2- To what extent do you think the current PHC (primary health care) organization in which FM is being implemented, has the capacity for proper implementation of FM? What aspects need change/improvement, etc?
- 3- What is your opinion concerning the policy of FM itself? Please discuss and explain your understanding with evidence.
- 4- Regarding the policy, to what extent do you think it is easily interpreted and clear in content?
- 5- To what extent do you think that FM has been accepted/rejected by providers and stakeholders (not public)? Please discuss with evidence.
- 6- How well has the policy been explained to you?
- 7- So far, have you received any feedback from other policy makers and stakeholders either from centre or periphery regarding the implementation of FM? Please discuss.

- 8- What is your perception from the role of insurance bodies in this implementation?
- 9- If you had an absolute power to make the policy and conduct the change, what did you do to maximize the insurance companies' efficiency in implementing FM?
- 10- As far as you are aware, how FM is interpreted by different layers at centre and periphery?
- 11- How do you interpret the political context and its role in the implementation? Please give reasons and evidence and discuss.
- 12- As a national official and well-informant person, do you think that the implementation of FM has been properly and adequately armed with adequate logistics preparation (financial, human resources, and equipments)?
- 13- Do you have any evidence that shows how far the policy of FM and its current process of implementation have been accepted by people? Please address the aspects that needs change (either in the policy or implementation) and give your reasons and substitutes.
- 14- What is your opinion about merging FM into Behbar (rural insurance for all)? Please discuss in details.
- 15- At the end of interview, is there any specific issue you would like to discuss further, add to your saying, or any particular factor which you think influence the implementation (facilitates or obstructs) and we did not discuss in our interview? Please feel free to talk about it while summarizing.

With special thanks for your time and invaluable contribution

2- Provincial officials and service providers at local level

"Implementing Family medicine in Iran: Identification of Facilitators & Obstacles"

Amirhossein Takian

Interview guide to be used at provincial and local levels

Date & venue:

Name & position of interviewee:

General questions and materials that must be covered during interviews with officials and providers at local level. They are subject to change; delete; expansion and refine according to the position and compliance of individuals (will be employed reflexively). Selected theories of implementation, results of reviewing empirical articles on facilitators of and obstacles to the implementation in health care and insights from exploratory visits to Iran have been largely considered to define these guide questions.

- 1- First of all, please explain your broad perception of family medicine (FM) in Iran with focus on your province (for providers with more focus on their relevant health centres and target population).
- 2- To what extent do you think the current PHC (primary health care) organization in which FM is being implemented, has the capacity for proper implementation of FM? If it is flawed, what aspects need change/improvement, etc?
- 3- What is your opinion concerning the policy of FM itself? Please discuss and explain your understanding with evidence.
- 4- Regarding the policy, to what extent do you think it is easily interpreted and clear in content? Please discuss according to evidence and your actual experience of the implementation so far.
- 5- How well has the policy been explained to you?
- 6- Please discuss how communication has affected the process of implementation (in your province or your centre according to position of the respondent) of FM from your point of view. Please particularly stress the role of mass media and local media in your discussion.

- 7- So far, have you received any feedback from other policy makers and stakeholders either from centre or within Golestan regarding the implementation of FM?
- 8- How do you deal with those feedbacks?
- 9- How do you conceive the implementation of FM as a policy? Please stress your understanding of the reality of the process of policy making regarding FM.
- 10- What is your perception from the role of insurance bodies in this implementation?
- 11- If you had an absolute power to make the policy and conduct the change, what did you do to maximize the insurance companies' efficiency in implementing FM, in Golestan and universally?
- 12- For local officials: As far as you are aware, how FM is interpreted by different layers at centre and periphery? To what extent it has been accepted/rejected by relevant people (policy maker, providers, public) in Golestan? Please discuss.
- 13- How do you interpret the political context and its role in the implementation? Please give reasons and evidence and discuss.
- 14- To what extent do you think that your province or your health centre has been properly and adequately armed with adequate logistics preparation (financial, human resources, and equipments) for implementing FM so far?
- 15- Do you have any evidence that shows how far the policy of FM and its current process of implementation have been accepted by the public? Please address the aspects must change (either in policy or implementation) and give your reasons and substitutes.
- 16- What is your opinion about FM into Behbar (rural insurance for all)? Please discuss in details.
- 17- At the end of interview, is there any specific issue you would like to discuss further, add to your saying, or any particular factor which you think influence the implementation (facilitates or obstructs) and we did not discuss in our interview? Please feel free to talk about it while summarizing your talk.

With special thanks for your time and invaluable contribution

3- Public Representatives

“Implementing Family medicine in Iran: Identification of Facilitators & Obstacles”

Amirhossein Takian

Interview guide to be used at local level for public's representatives

Date & venue:

Name & position of interviewee:

General questions and materials that must be covered during interviews with representatives of public at local level. They are subject to change; delete; expansion and refine according to the position and compliance of individuals as well as results of interviews at national level and other findings from local level (will be employed reflexively). Selected theories of implementation, results of reviewing empirical articles on facilitators of and obstacles to the implementation in health care and insights from exploratory visits to Iran have been largely considered to define these guide questions.

- 1- First of all, please explain your broad perception of family medicine (FM) in Iran with more focus on what you have observed in your area. Simply, what does FM mean to you?
- 2- As user of services, to what extent do you think the current PHC (primary health care) organization in which FM is being implemented, has the capacity for proper implementation of FM? What aspects need change/improvement, etc? Please give reasons, evidence and discuss.
- 3- How well has the policy been explained to you?
N.B. Ask more questions to understand the role of that informing procedure on his/her perception of implementation.
- 4- What is your general opinion concerning FM itself?
- 5- Do you use services under auspicious of FM (Behbar) in your village? Are there differences between those and the ones were delivering through the PHC?
- 6- In each case, please give reasons and discuss. Are you aware of other centres? Can you compare those with your centre?
- 7- How is the behaviour of staff that are in charge of delivering care with them? Please indicate your evidence and discuss impacts of those factors in details.

- 8- In case of need to health care, where is the first point you refer to seek care in your area? If says health centre, go deeper and ask why? If says somewhere else, ask precisely why he/she does not go to the health centre, trying to understand his/her objections for finding facilitators and obstacles.
- 9- What services do you preferably use from health centre and why?
- 10- Have you ever given any feedbacks regarding implementation of FM to providers and officials? If yes, how did you do that?
- 11- Was it responded or employed? What was the result?
- 12- Since it was started, have you seen any changes in FM and the way that is being implemented in your area?
- 13- What is your perception from the role of insurance bodies in this implementation?
- 14- If you had an absolute power to make the policy and conduct the change, what did you do to maximize the insurance companies' efficiency in implementing FM?
- 15- Have you or your relatives been referred to a higher level for seeking care by a family doctor? How did you find that referral and your acceptance?
- 16- As far as you are aware, how FM is interpreted by other people in your area? To what extent it has been accepted/rejected by them?
- 17- How do you interpret the political context and its role in the implementation? Please give reasons and evidence and discuss.
- 18- To what extent do you think that your health centre has been properly and adequately armed (financial, human resources, and equipments) for implementing FM so far?
- 19- At the end of interview, is there any specific issue you would like to discuss further, add to your saying, or any particular factor which you think influence the implementation (facilitates or obstructs) and we did not discuss in our interview? Please feel free to talk about it while summarizing your talk.

With special thanks for your time and invaluable contribution

APPENDIX III. Summary of emerged themes & sub-themes

FMFO study: List of final themes & sub-themes

I. Aspect of the policy (content)

I.1 Aspects that promoted its acceptance:

- Focus on health;
- Improved efficiency;
- Improved quality of care;
- Increased confidence in doctors;
- Purchaser-provider split;
- Expanded provision of services;
- Expanded entitlement;
- Better employment opportunities;
- Increased pay for practitioners;
- New payment framework;
- International root of the policy.

I.2 Aspects that criticized the policy:

- Top-down approach;
- Lack of sustainability in funds;
- Ambiguity;
- Too much flexibility;
- Lack of local customization;
- Impracticalities;
- Unreliable expectation.

II. The existing environment (context)

II.1 The existing PHC (Primary Health Care) network

- Position of the PHC for the public
- Accessibility
- Efficient hierarchy
- The only possible host

II.2 The insurance system

II.3 Organizational capacity of the health system

- Capability of the implementers
- Conflict of interests of policy-makers
- Financial governance of health
- Poor collaboration

II.4 Individuals' knowledge & insight

FMFO study: List of final themes & sub-themes

II.5 Legal ground for implementation

II.6 Political environment

- General pattern of health governance
- Ambiguous policy-making process
- Support for the policy

II.7 Rural setting specifications

II.8 Availability of resources

- Physical facilities
- Equipping health centres
- Funding
- Personnel
- Clinical guidelines

III. Experience of implementation (process & management)

III.1 Administration

- Public registration
- Provision of services
- Bureaucratic payment system
- High turnover of doctors
- Medical recording system
- Diversion of funds

III.2 Cooperation

- Lack of a common language
- Inconsistent interpretation of goals
- Lack of coordination
- Lack of trust
- Lack of advocacy
- Lack of coalitions

III.3 Political management of implementation

- Politicisation of the reform
- Governmental support
- Lack of decentralization
- Rushed implementation

III.4 Communication

- Lack of feed back from the periphery
- Communication among individuals
- The mass media

III.5 Explanation of the reform to staff & public

- Explanation of FM to practitioners
- Training the public

FMFO study: List of final themes & sub-themes

III.5 Auditing performance

- The appropriateness of tools & methods
- Poor quality of audit staff
- Applying audit results

IV. Impact of the policy on local practitioners and the public (impact on actors)

IV.1 Impact on public practitioners

- Lack of incentives
- Lack of job security
- Lack of respect
- Lack of pay
- Poor working condition
- Poor contracts
- Ethnic tensions
- Rationing

IV.2 Impact on the private practitioners

IV.3 Impact on public

- Resistance to rationing
 - Preference for specialists
 - Demand for unnecessary prescriptions
 - Reduced user fees
-

APPENDIX IV. The information sheet

Implementing Family Medicine in Iran: Identification of Facilitators & Obstacles

Amirhossein Takian, MD, MHR

***Health Services Research Unit
Department of Public Health and Policy
London School of Hygiene and Tropical Medicine
105 Bedford Sq, London, WC1B 3DP
Tel: 0044 (0) 2079272389
Fax: 0044 (0) 2072994632
amirhossein.takian@lshtm.ac.uk***

Implementing family medicine (referral system together with rural insurance programme in this study) is at the heart of the health reforms in our country. The easy part is to develop policies and plans but it is a lot harder to implement change. While progress in implementing change has progressed well in some places, in other places progress has not been as fast. This study aims to find out why this is so: what factors help promote change and what factors tend to hold-up or prevent the plans being implemented.

To identify facilitators of and obstacles to implementation of family medicine in Iran, I am seeking the views of all those with an interest or involvement in family medicine: GPs, midwives, managers, policy makers, and other local people. Results of this study will help to improve future implementation.

Six health centres in which family medicine is implemented (practiced) have been selected. Taking part in the study is entirely voluntary. The interview will last for about one hour. You will be asked general questions as well as your personal experience about the process of implementation. You will be free to withdraw at any time without giving any reason.

Data collection will be carried out over a period of several months. Meetings will be held for staff of each health centre at the start of the study to provide further information and setting interviews. The data collected will be recorded mainly by the keeping of detailed field-notes and where possible interviews will be recorded with the consent of participants. All of the data collected will remain strictly confidential, listened to only by me, and written up so that it will not be possible to identify individuals. At the end of study all tapes will be destroyed.

All the expenses for this study including travelling, accommodation, equipments such as laptop and voice recorder, will be paid by the researcher himself. There is no financial incentive or inducement to take part in the study.

This work has been approved by Ethics Committee of University of Medical Science and health Services, Golestan Province, Iran and Ethics Committee of the London School of Hygiene and Tropical Medicine. It is hoped that the findings of the study will make a positive contribution to implementation of family medicine as well as series of reforms in the health system of our country.

Thank you for taking the time to read this. I look forward to meeting you soon and to hearing your comments. If in the mean time you have any questions about this project please do not hesitate to email me on: amirhossein.takian@lshtm.ac.uk

With best wishes
Yours sincerely

Amirhossein Takian, MD
PhD Student

Appendix V. Final list of included literature in Chapter 2

Books	Articles
Bardach, 1977	Bossert, 1998
Barrett & Fudge, 1981	Buse, 2008
Buse et al, 2005	Elmore, 1978; 1981
Curry, 2000	Hill, 1997
Dye, 2001	Hjern & Hull, 1982
Fulop et al, 2001	John, 2003
Goggin et al, 1990	Lane, 1987
Grindle & Thomas, 1991	Linder & Peters, 1989
Harrison, 2004	Nohrstedt, 2005
Hill & Hupe, 2002	O'Toole, 1986; 1995; 2000; 2004
Hogwood & Gunn, 1984	Pollitt, 1993
Hood, 1976	Sabatier, 1986
John, 2002	Sabatier & Mazmanian, 1979
Lipsky, 1980	Saetren, 2005
March & Olsen, 1989	Schlager, 1995
Mazmanian & Sabatier, 1983	Schofield, 2004
Mullins, 2002	Smith, 2002
Osborne & Gaebler, 1992	Tranfield & Starkey, 1998
Rothstein, 1998	Tuohy, 2003
Sabatier, 1999; 2007	Van Meter & Van Horn, 1975
Sabatier & Jenkins-Smith, 1993	Walker & Gilson, 2004
Ward, 1995	Walt et al, 2008
	Weible & Sabatier, 2005

APPENDIX VI. Summary of characteristics and findings of included studies in chapter 3

Author(s), year of publication & context	Study design	Participants	Aim	Method	Facilitators	Obstacles	Key message (s)
1- Kaner et al, 2003, UK	Qualitative case-study approach	25 service providers	Understanding providers' view on the essential shift in policy	Ethnography, in-depth interview	The broader service context	1- Poor staff morale Differential interpretation of the reform 2- Negative reactions to the way the model is introduced to the workforce	1- Successful reform is unlikely if those responsible for delivering care are not part of process of change 2- A full diagnostic analysis of the system should be carried out prior to introduce change
2- Harrison et al, 2000, South Africa,	Mixed Qualitative-quantitative approach	community members, nurses	To explore attitudes and beliefs about abortion and the Termination of pregnancy Act	Community survey, in-depth interviews		1- Informing providers poorly 2- Beliefs and religious issues 3- Coincidence of other important issues which affects implementation	1- A process of information dissemination and community consent prior to implementation is essential 2- Legalization alone can not ensure implementation

3- Rese et a, 2005, Russia	Mixed Qualitative- quantitative approach	Directors of all 15 general practice training centres	To explore how the general practice model was implemented	Questionnaire survey, in-depth interviews		1- Adverse regulatory and working environment in the contextual situation 2- Poor professional recognition of main providers 3- Inadequate infrastructure and financial mechanisms	of controversial reforms (abortion e. g) 1- Successful reform will require changes in the legislative and policy framework and better management of staff and resources 2- Institutions' resistance to change have to be tackled for successful implementation
4- Lavis et al, 2001, Canada,	Qualitative study	Policy makers executive directors of Canadian NGOs	To assess the influence of information on making a policy and identifying the barriers of using these information to make the policy	Telephone and in-depth interviews		1- Institutional or interest-related barriers 2- Idea-related barriers	1- How decisions are made is important 2- Speaking in others' language to introduce policy 3- Potential winners and losers with political influence will

5- Gill & Ahmed, 2004, Bangladesh,	Case study			Evaluating and explaining the new policy of emergency obstetric care (EmOC)	In-depth interviews, documentary analysis, observation	1- Providing needed equipments and facilities 2- Training staff to work as a team 3- Ongoing supervision for quality assurance 4- Management information system 5- Creating links between lower and higher people	Parallel systems	never be lost from the policy development process
6- Delvin et al, New Zealand, 2001	Qualitative-descriptive, case study			Evaluating major changes in the health system	Documentary analysis, observation	Ensuring that the reorganization achieves the government's goals	Tension between local autonomy and national consistency	1- Continual restructuring is costly and disruptive 2- The desire for local autonomy in decision making will have to be balanced

								against national consistency in access to health care
7- Schneider & Stein, South Africa, 2001	Qualitative-descriptive study, policy analysis			Investigation of implementing AIDS policy in post-apartheid South Africa	Documentary analysis, observation	1- High ranked politicians' support 2- Participation of involved people in shaping policy 3- Not so much government 4- Quality of political concern		1-Moving from intentions to results, requires a strategic and political approach for which there are no simple recipes 2- Developing a deep understanding of the context in which actors are playing is a big challenge to identify opportunities and threats to implementation
8-- Plaza et al, Colombia, 2001	Quantitative-qualitative study	Key actors at national and local level	Analysis of the process of implementation of the new Colombian subsidized system	Document review, interview, secondary analysis of national surveys	Coordination and organization problems	1- Resource availability 2- The way in which the implementation process is conducted 3- The speed at which management	1- Training users is very important to know their right 2- Keeping a part of traditional services while	

							capacity is developed 4- Public support	the reform is being implemented 3- Establishing a solid institutional capacity to effectively run a reform seems important
9- Watt et al, Canada, 2005	Qualitative study	Newly delivered mothers, hospital and community-based practitioners and administrators	Comprehensive analysis of barriers and facilitators to practice change in implementation of a health care policy	Questionnaire, interview, focus group			1- Contextual factors 2- Policy uptake 3- Organizational context 4- Who should make the decision and on what basis?	1- If implementation is to be successful, all the players need to be included 2- Policy implementation in any health care system relies upon provider commitment
10-Atkinson, S, Zambia, 1997	Qualitative-descriptive study, policy analysis		To describe the way in which different actors in a health system, interpret and experience reform directives and	Document analysis, interview	1- Decentralization 2- Financial incentives 3- Universal agreement on reform	Low literacy that makes communication difficult	Concept of veto points appears useful for understanding how policy implementation may get blocked or	

			activities			transformed during implementation
11- Shiffman, J 2004 , Indonesia	Qualitative- descriptive study, policy analysis	Civil servants, policy makers, external stakeholders	Investigating political management in the Indonesian family planning programme during the Suharto era	Document analysis, interview, observation	1- Building bureaucratic alliances 2- Neutralizing religious oppositions 3- Securing social support	1- Managers enhance prospects for programme effectiveness if they systematically identify political and social allies and opponents 2- managers should engage these actors directly
12-Walker & Gilson, 2004, South Africa	Qualitative analytical study, case study	Primary health care nurses, clinic co- ordinators	To capture the perceptions and perspectives of front-line providers concerning the process of policy implementation	Case study, self- administered survey, in-depth interview	1- Increased workload 2- Shortage in resources 3- Paying no attention to innovation	1- Central-level planners must acknowledge the discretion that front-line implementers have in implementation 2- The legitimacy of a new policy must be recognized by the street-level bureaucrats ultimately

									responsible for its implementation
13- Kumar & Gantley, 1999, UK	Qualitative analytical study	General practitioners	To explore general practitioners' perceptions of their role in implementing genetic technology	In-depth interview				1- Ethical considerations 2- Threatening traditional and core skills of providers	Implementation of new policies that must be conducted in general practice, should be integrated within existing generalist frameworks
14-Kinsman et al, 1999, Uganda	Randomized community-based intervention, qualitative study	Primary and secondary schools	To assess impact of information, education, and communication (IEC) on management of reducing HIV transmission	RCT		1- Providers' enthusiasm 2- Trust between users and providers	1- Trust between users and providers 2- Language and communication difficulties 3- Programme content 4- Time constraints 5- Sexual harassment of female users by male providers	Large scale programmes will be more successfully implemented if they firstly implement in smaller scale	
15- Mosquera et al; 2001, Colombia	Mixed Qualitative-quantitative approach, case study	Informants from territorial administration, users, insurers, providers, and policy	To explore social representations of different actors that may hinder or enable effective	Structured questionnaire, semi-structured interview, group discussion	1- Universal agreement and enthusiasm concerning the reform 2- Embedded bureaucratic and	1- Lack of specific resources for promotion and development of policy among users 2- Lack of organizational capacity and	User participation in implementing reform is not a matter of policies and legislation; it is a complex		

				a scheme in assessing scheme benefits				provision 3- Inconvenience that using the programme causes in family 4- Lack of information about what to do 5- Lack of literacy in users 6- Lack of skills and training in personnel	must have in place mechanisms for actively identifying and assessing problems faced by members in using the service
18-Bergan & White, 2005, UK	Quantitative-qualitative study			To understand how community care policy had impacted upon community nursing practice	National telephone survey, Purposeful sample of 13 case studies, interviews	1- The clarity of policy guidance 2- The extent to which it coincided with professional values	1- The personal vision of the community nurse 2- Local practices and policies	Changing practices over time can follow a theoretical framework	

APPENDIX VII. Blaxter's criteria for the evaluation of included articles in chapter 3

	Design	Connection To knowledge	Appropriate Criteria	Theoretical Justification of cases	Match of methods With questions	Relationship Between field work and subjects	Systematic data Collection & record Keeping	Accepted procedure for analysis	Systematic analysis	Correlation Between data & themes
1- Kaner et al	+	+	+	+	+	+	+	+	+	+
2- Harrison et al	+	+	-	-	+	+	+	+	-	+
3- Reese et al	+	+	+	-	+	-	+	+	+	-
4- Lavis et al	+	+	-	+	-	+	+	-	+	+
5-Gill&Ahmed	+	-	-	-	+	+	+	+	-	+
6- Delvin et al	+	+	+	-	-	+	-	+	+	+
7-Schneider &Stein	+	+	-	+	+	+	-	+	+	-
8- Plaza et al	+	-	+	-	+	+	+	+	-	+
9- Watt et al	+	+	+	+	+	+	+	+	+	+
10- Atkinson	-	+	-	+	-	-	-	+	+	+
11-Shiffman	+	+	+	+	+	-	+	+	+	+
12- Walker &Gilson	+	+	+	+	+	+	+	+	+	+
13- Kumar & Gantley	+	+	+	+	+	+	+	+	+	+
14- Kinsman et al	+	-	-	+	+	+	+	+	+	-
15-Mosquera et al	+	+	+	+	+	-	+	+	+	+
16- Danishevski et al	-	-	+	-	-	+	+	+	+	-
17-Sinha et al	+	+	+	+	+	+	+	+	+	-
18- Bergan &While	+	-	-	-	+	+	+	+	+	-

	Evidence-based arguments	Validity of findings	Comprehensibility of analysis to participants	Clear contextualisability of the research	Systematic presentation of data	Clear distinction between data & its Interpretation	Sufficient evidence for conclusions	Clarity in author's own position	Credible and appropriate results	Adequate ethical consideration
1- Kaner et al	+	+	-	+	+	+	-	+	+	+
2- Harrison et al	+	+	+	+	+	+	+	+	+	+
3- Reese et al	+	+	+	-	+	+	+	+	+	+
4- Lavis et al	-	+	+	+	+	-	+	+	+	+
5- Gill & Ahmed	+	-	+	+	+	+	+	+	+	+
6- Delvin et al	+	+	+	+	+	+	+	+	+	+
7- Schneider & Stein	+	+	+	+	-	-	+	+	+	+
8- Plaza et al	+	+	+	+	+	+	+	+	+	+
9- Watt et al	+	+	+	-	+	-	+	-	-	+
10- Atkinson	+	+	+	+	+	+	+	+	+	+
11-	+	+	+	+	-	+	+	-	+	+

